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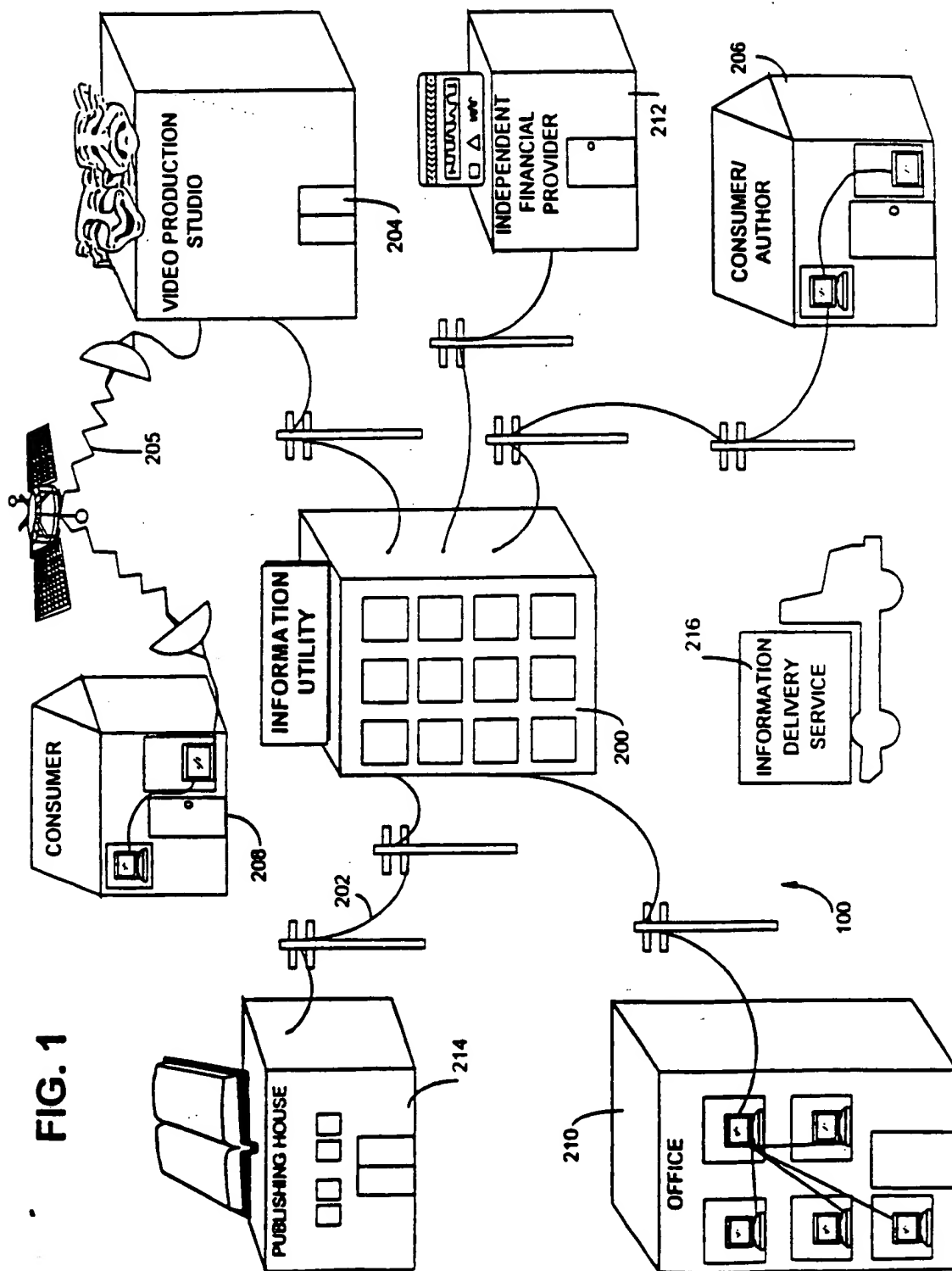
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FIG. 1



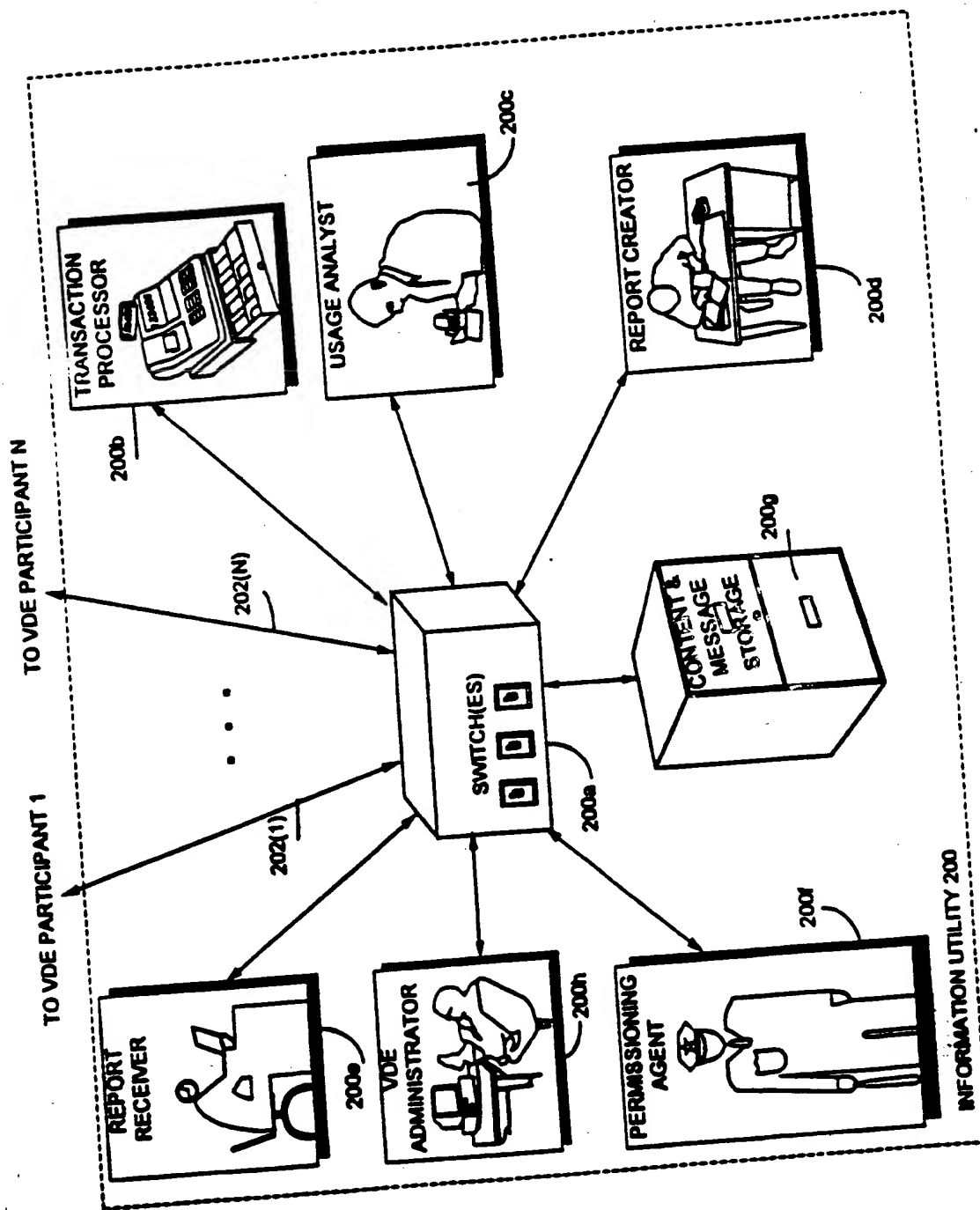


FIG. 1A

FIG. 2

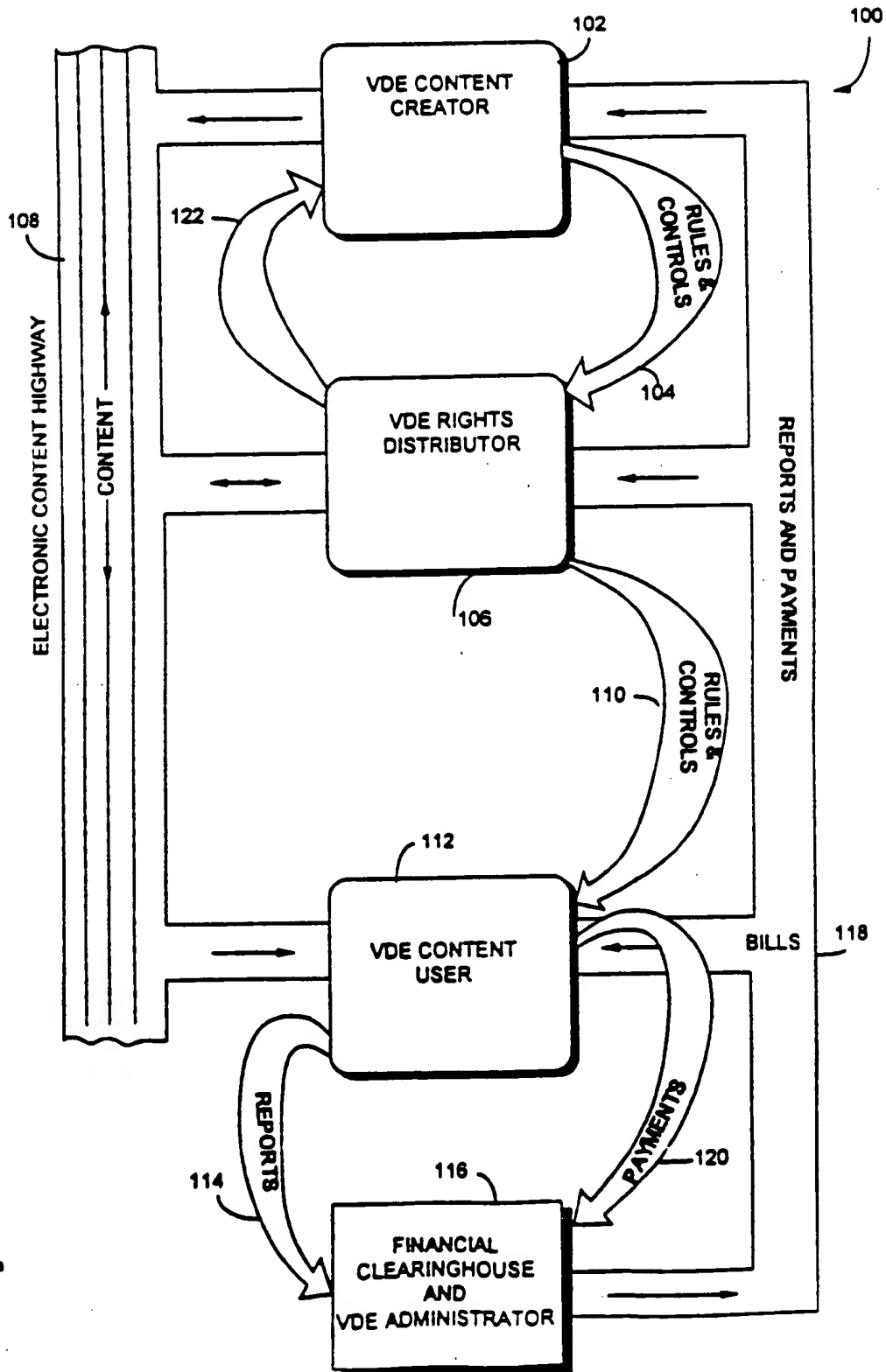


FIG. 2A

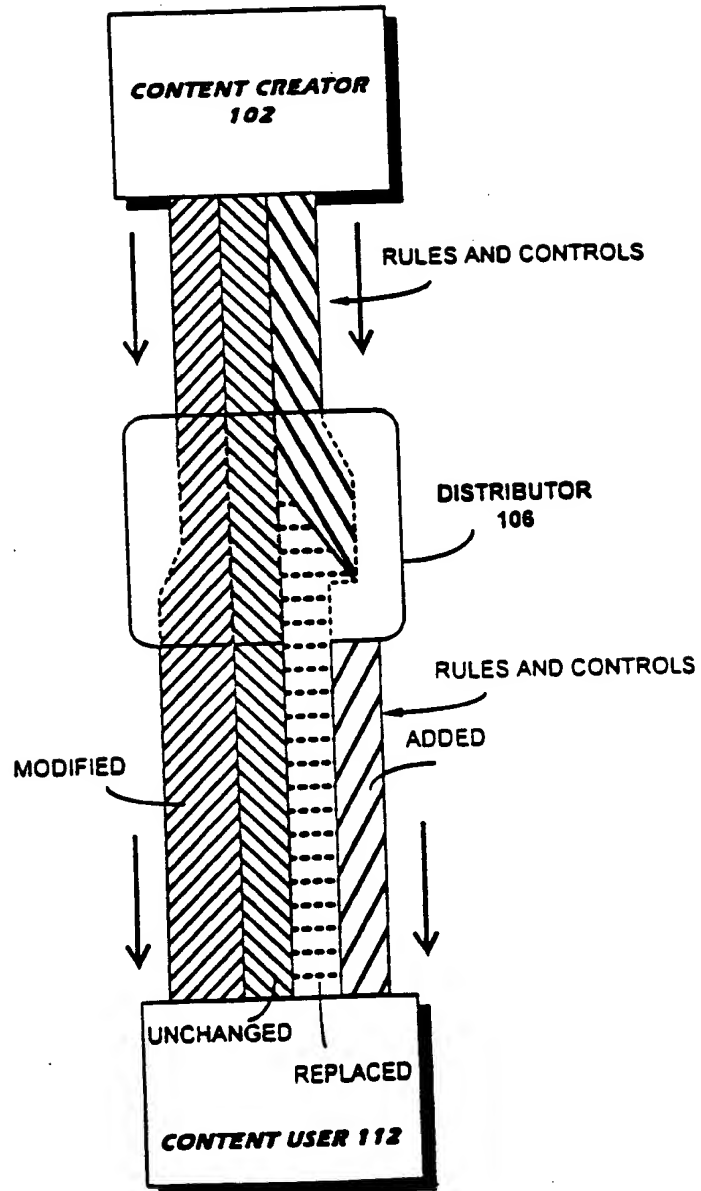
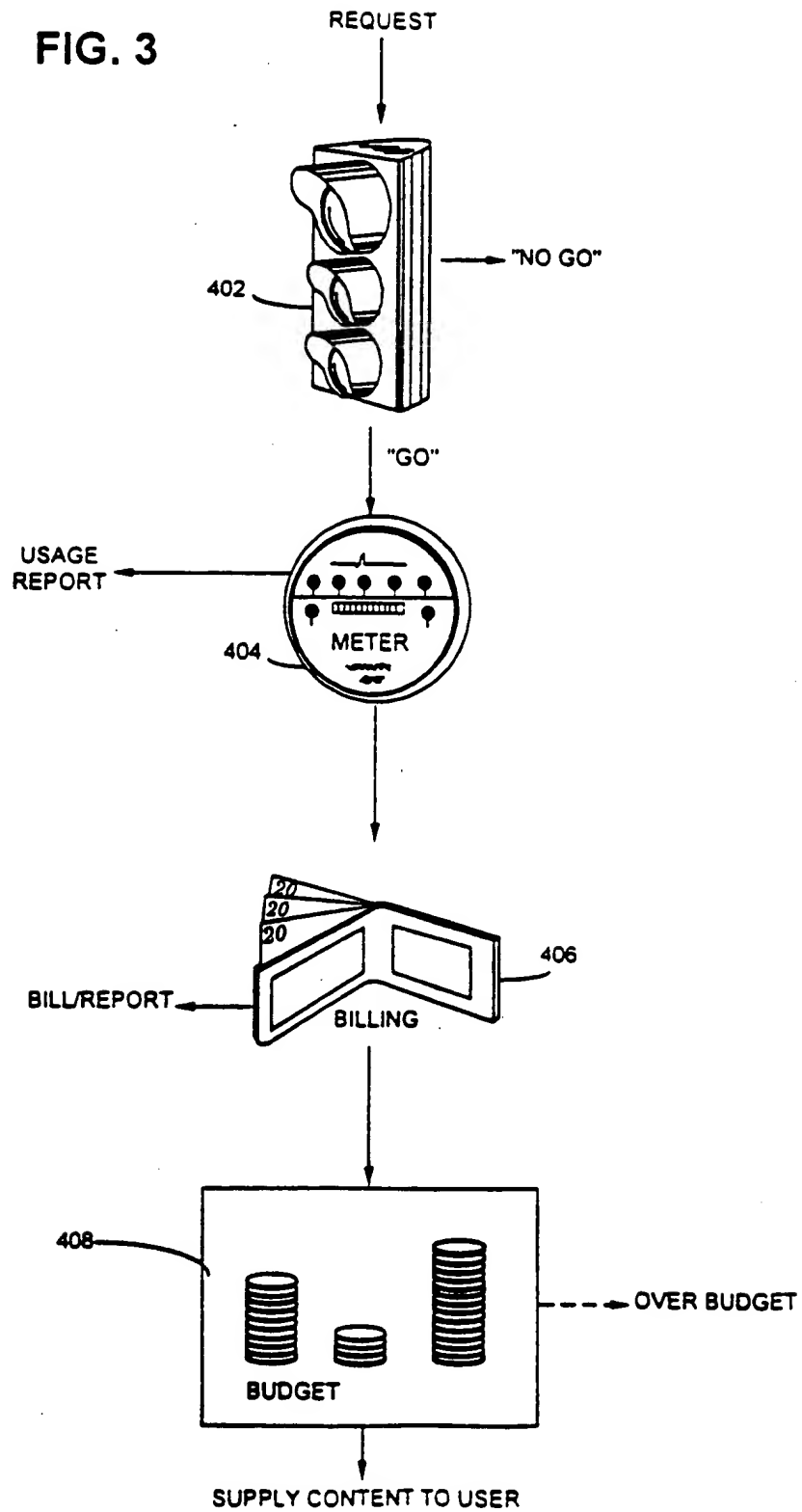


FIG. 3



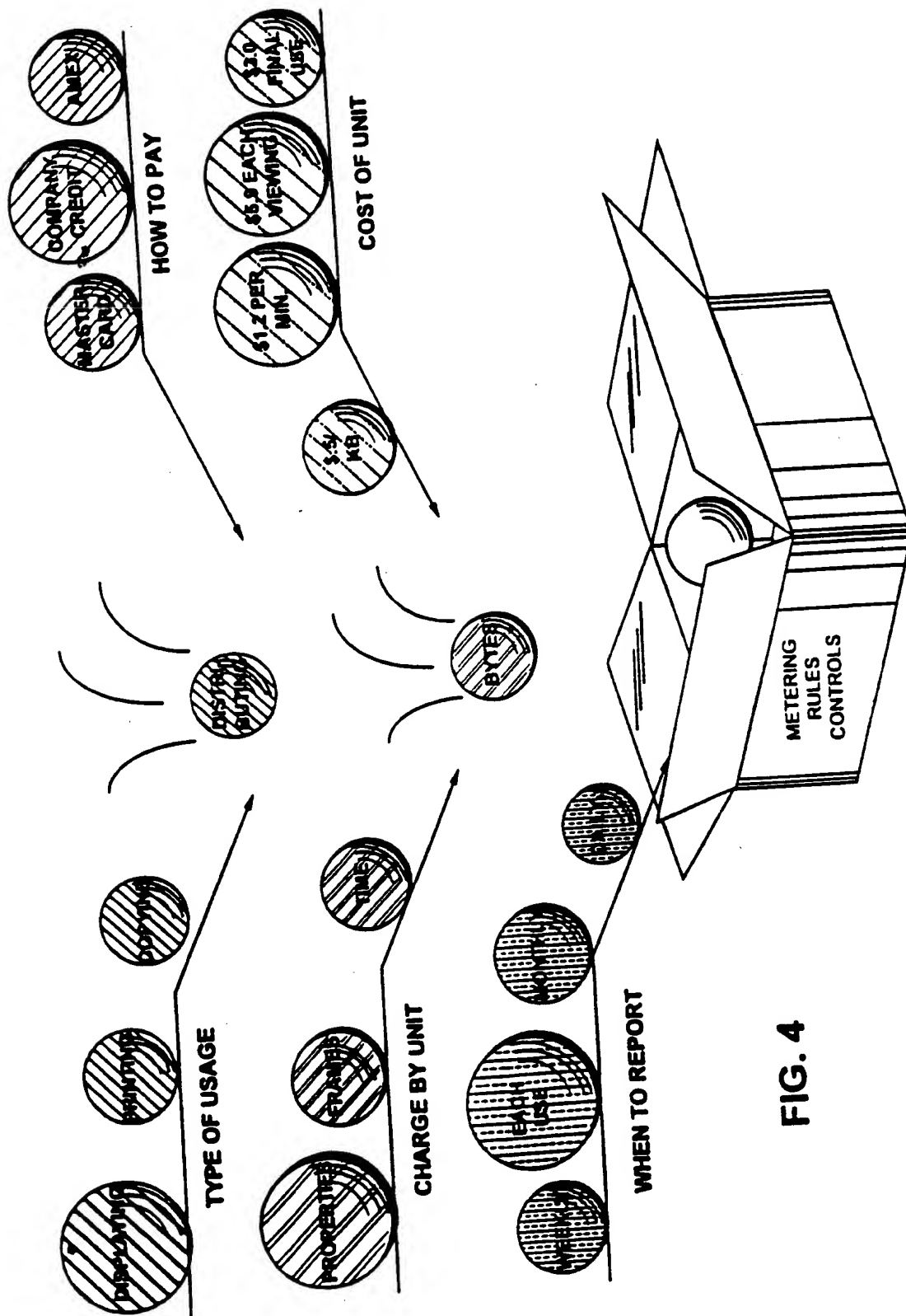


FIG. 4

FIG. 5A

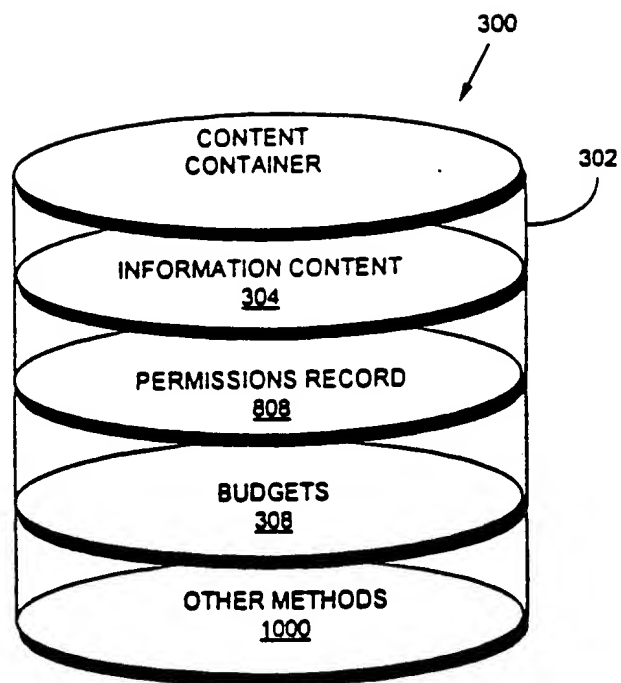


FIG. 5B

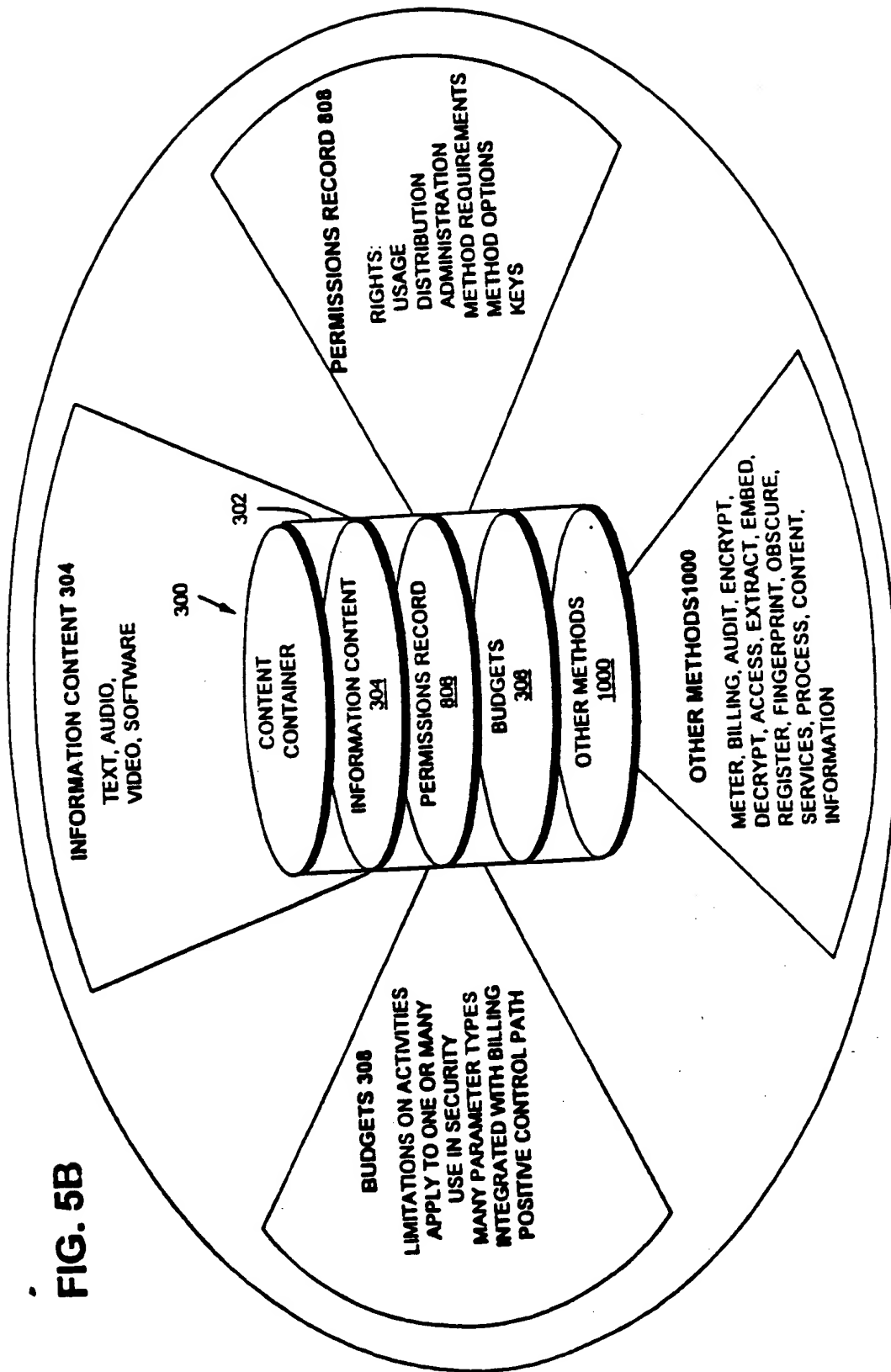
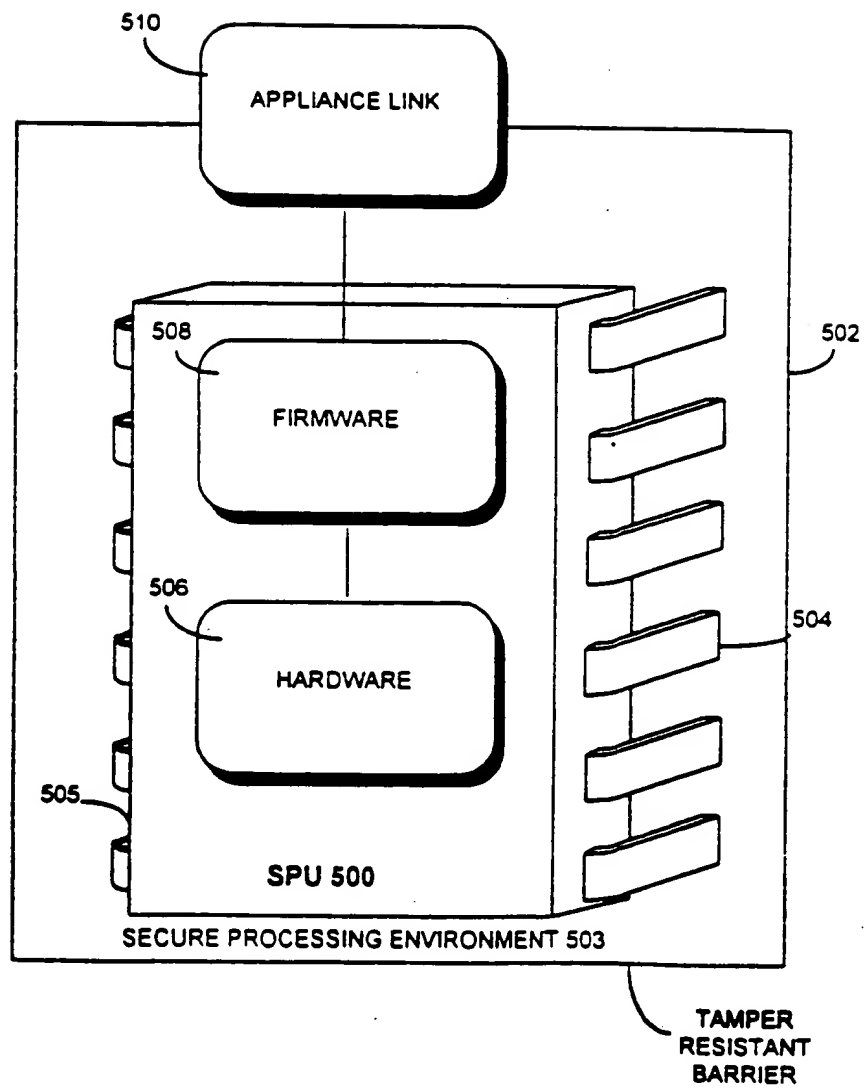


FIG. 6



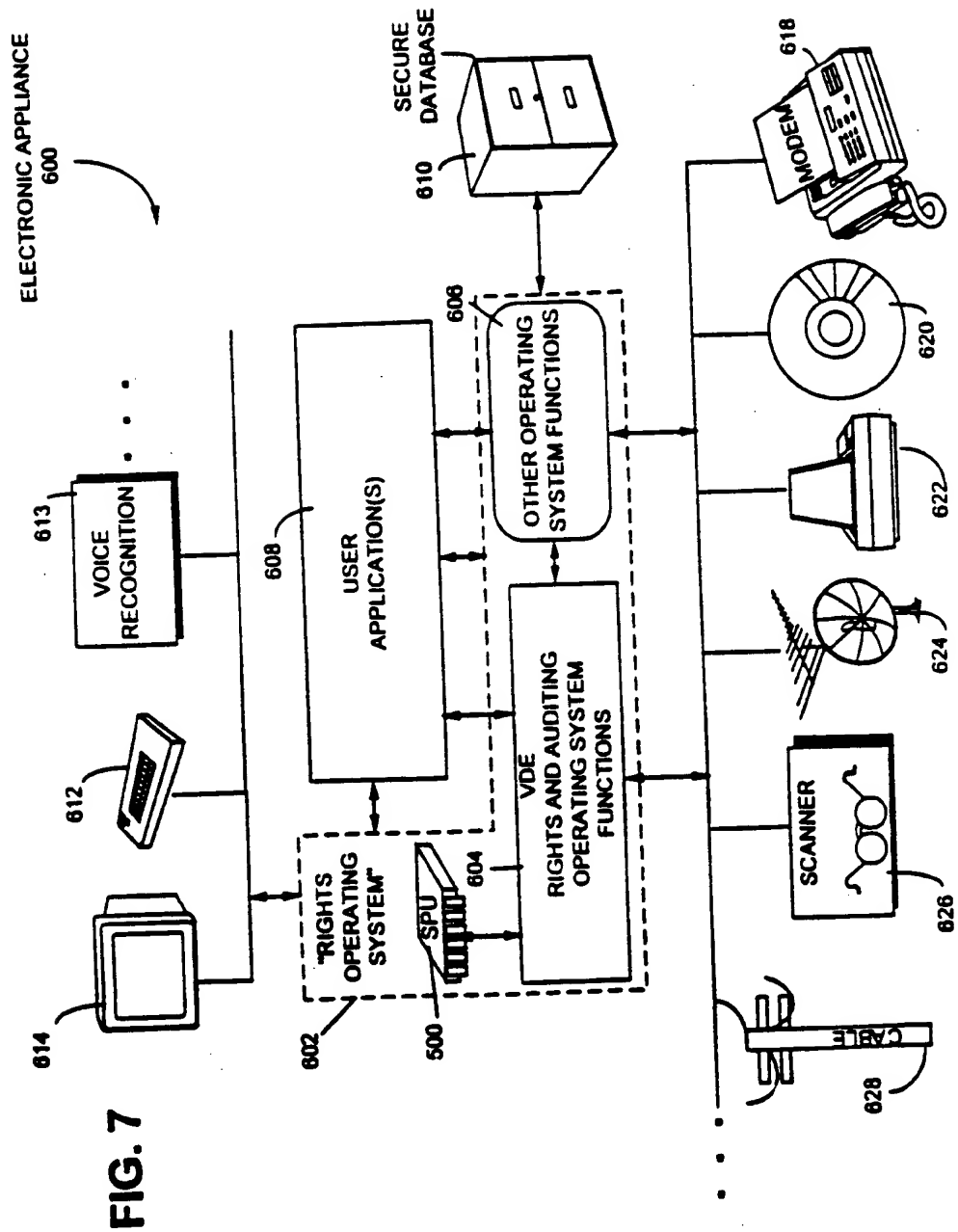
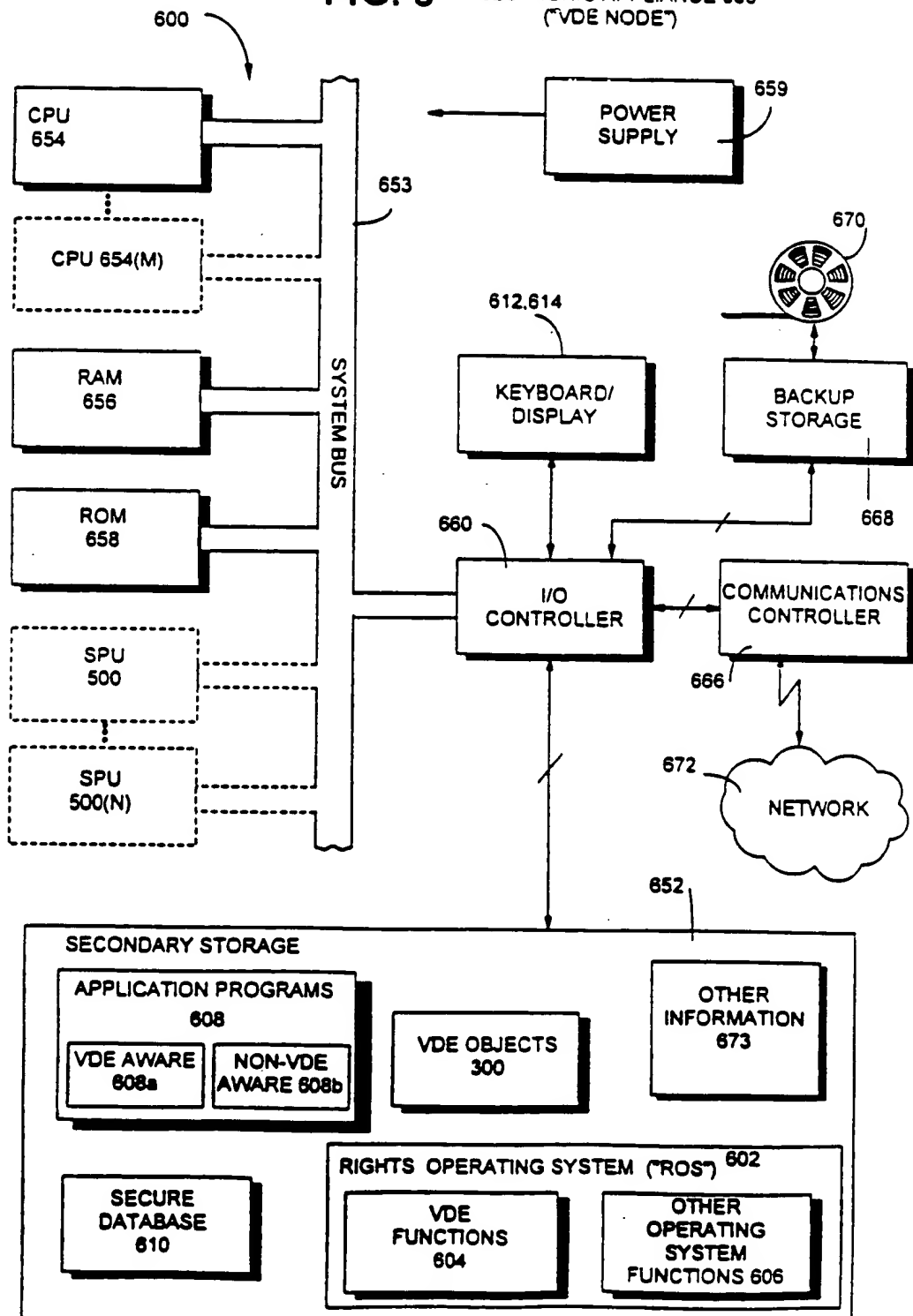


FIG. 7

FIG. 8 ELECTRONIC APPLIANCE 600
("VDE NODE")



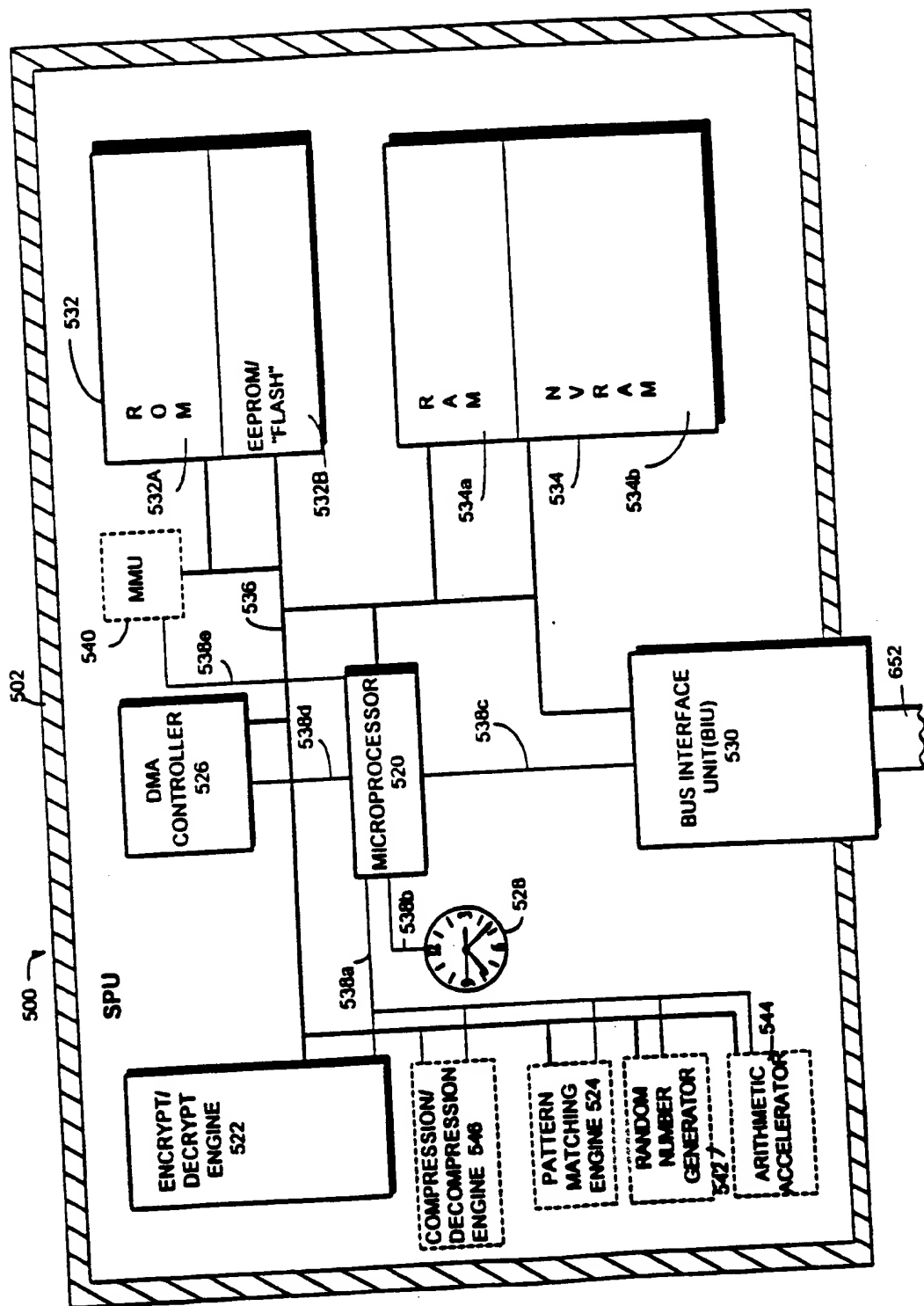


FIG. 9

FIG. 11C

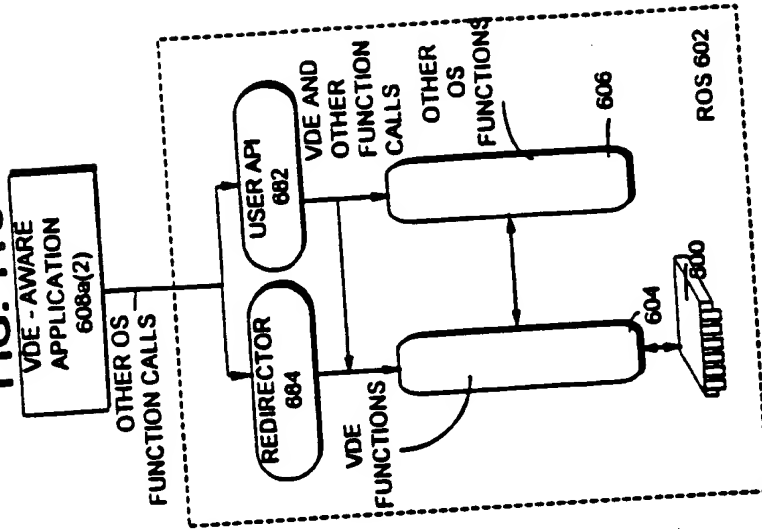


FIG. 11B

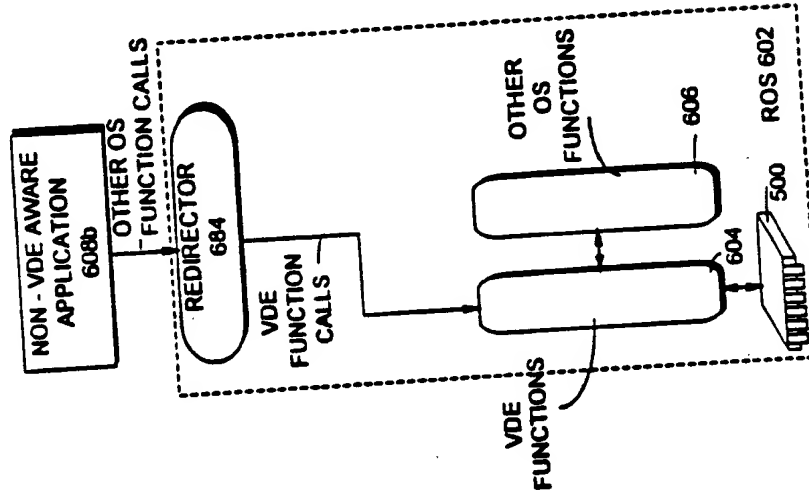
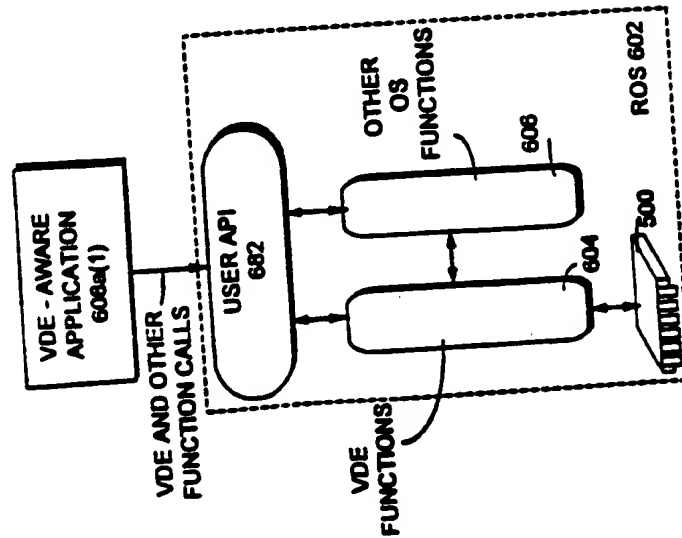
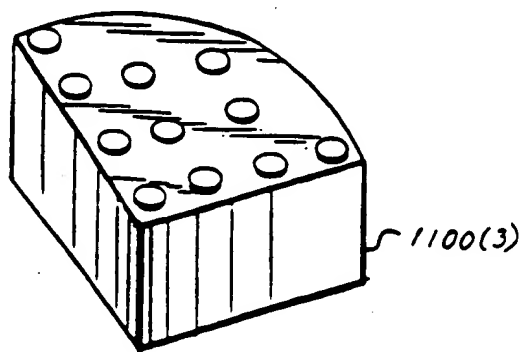
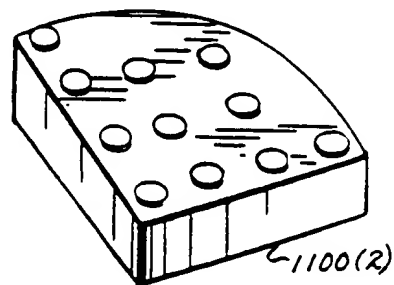
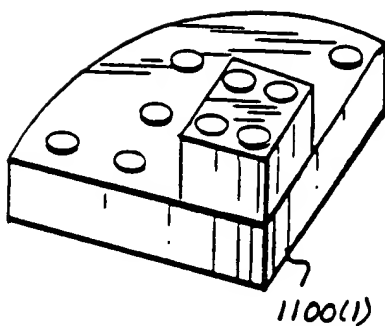
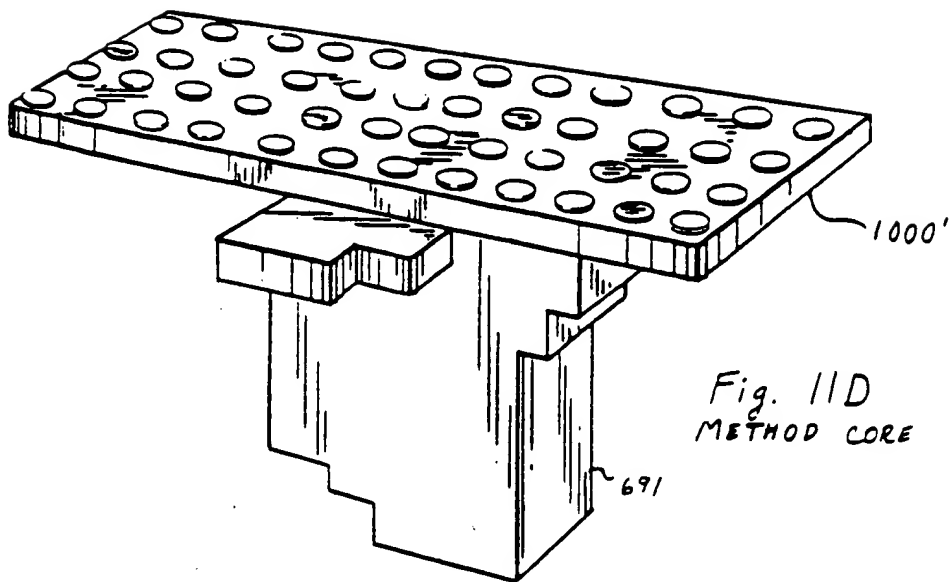


FIG. 11A





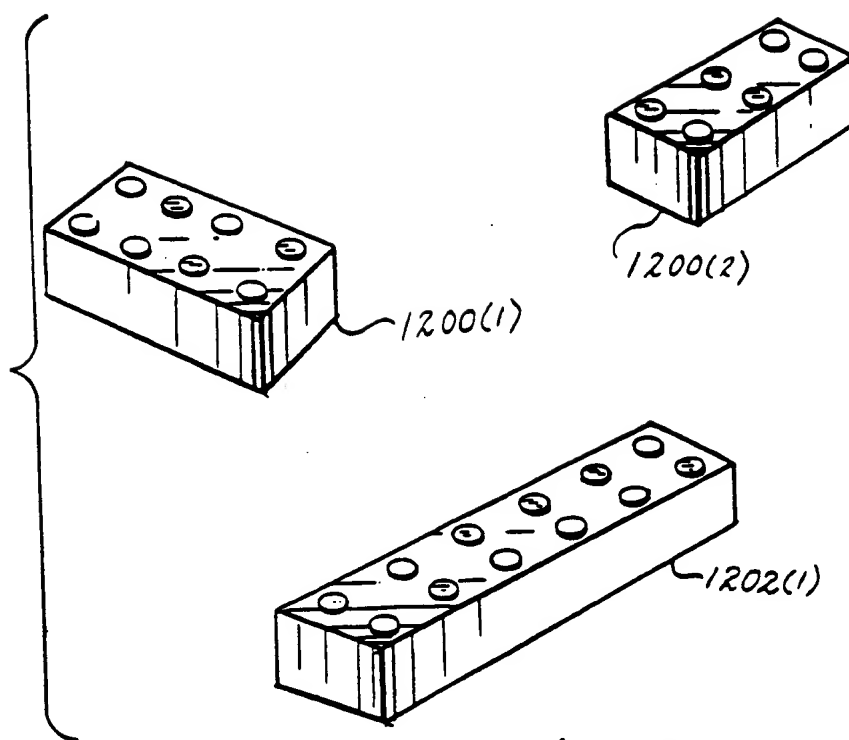
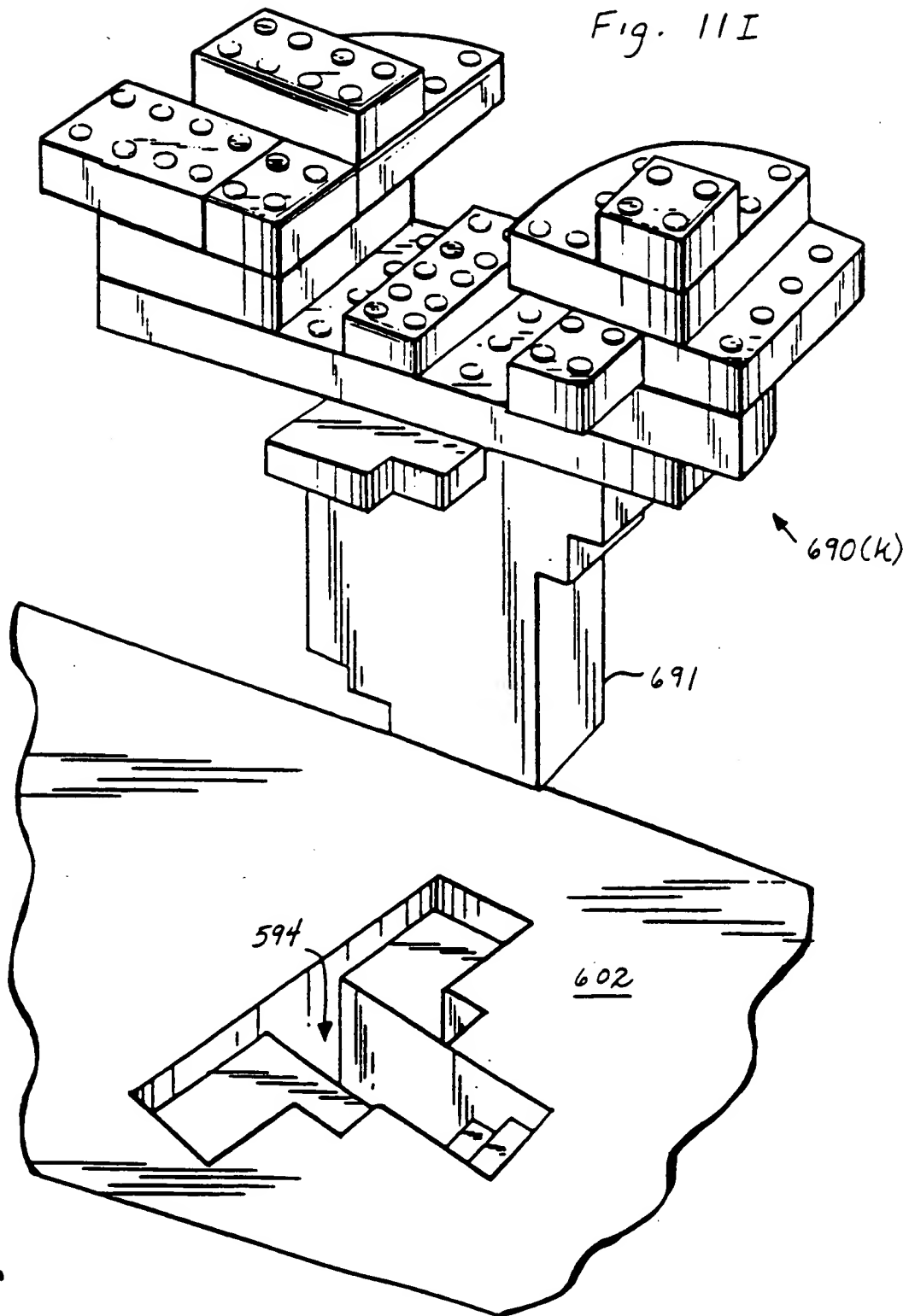


Fig. 11H.
DATA STRUCTURES

Fig. 11I



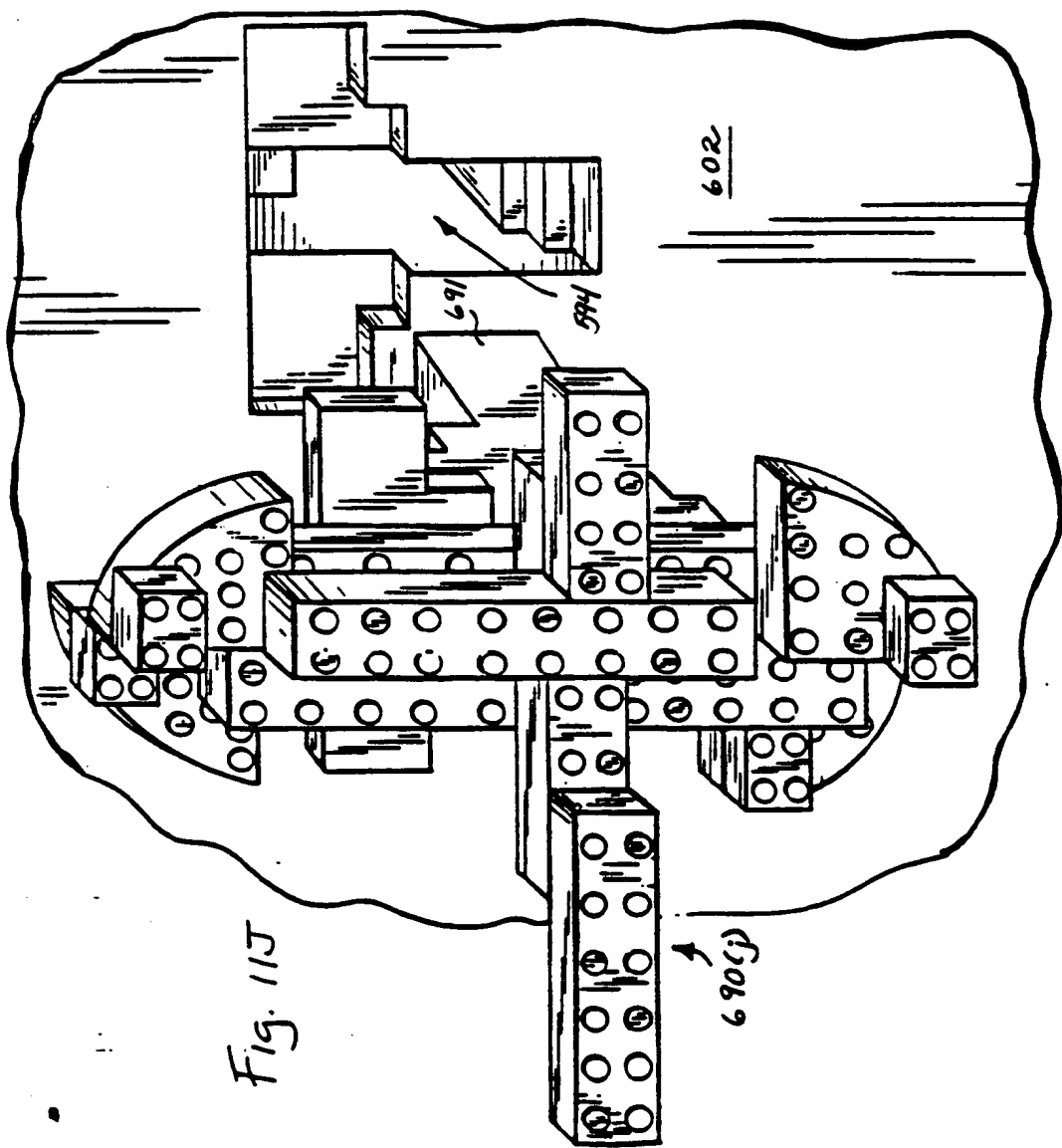


Fig. 11J

FILE SYSTEM 687



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FIG. 12A
OBJECT CREATION

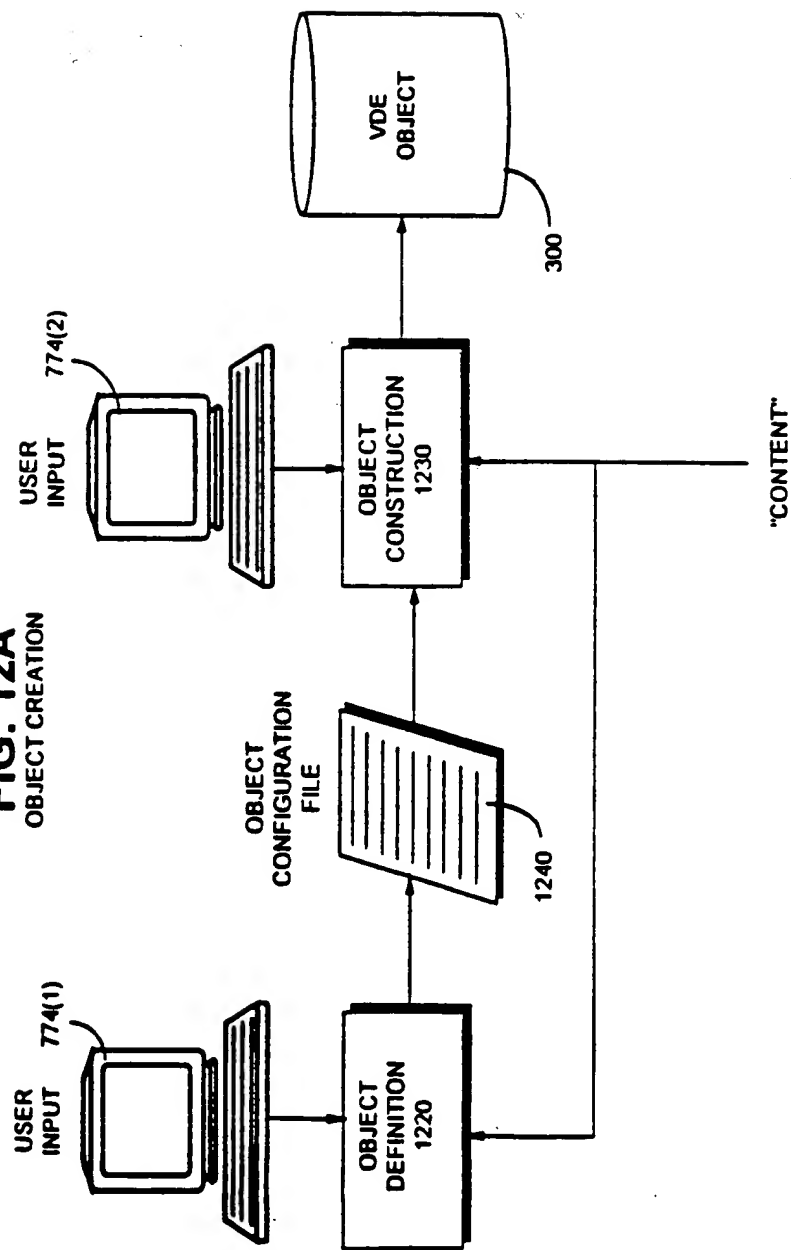
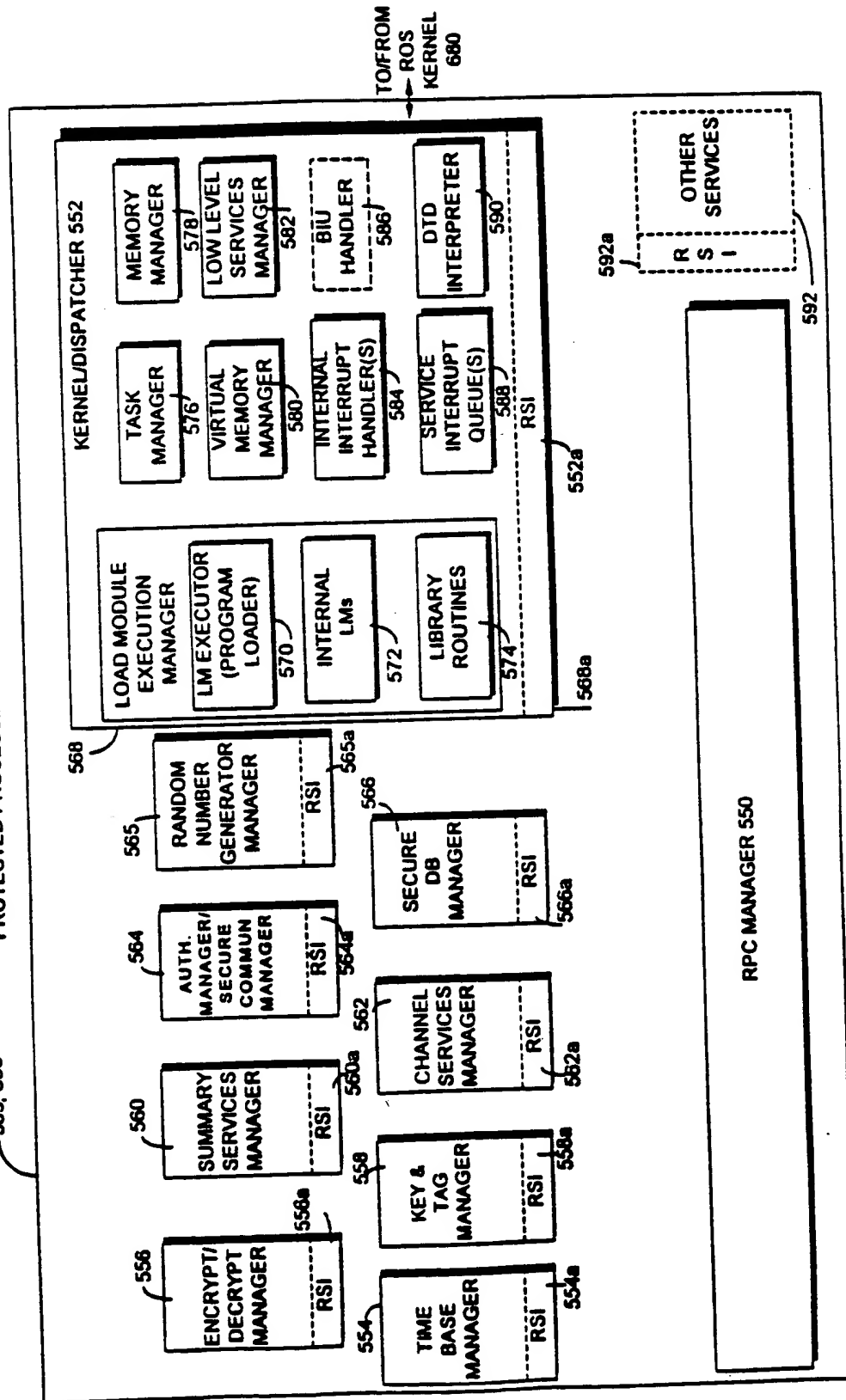


FIG. 13

PROTECTED PROCESSING ENVIRONMENT 650

503, 655



DEVICE FIRM WIRE LOW LEVEL SERVICES 582
INITIALIZATION
POST
DOWNLOAD CHALLENGE/RESPONSE AND AUTHENTICATION
RECOVERY
EEPROM/FLASH MEMORY MANAGER
KERNEL/DISPATCHER 552
INITIALIZATION
TASK MANAGER 576 (SLEEP/AWAKE/CONTEXT SWAP)
INTERRUPT HANDLER 584 (TIMER/BIU/POWER FAIL/WATCHDOG TIMER/ENCRYPTION COMPLETED)
BIU HANDLER 586
MEMORY MANAGER 578
INITIALIZATION (SETTING MMU TABLES)
ALLOCATE
DEALLOCATE
VIRTUAL MEMORY MANAGER 580
SWAP BLOCK PAGING
EXTERNAL MODULE PAGING
MEMORY COMPRESS
RPC AND TABLES 550
INITIALIZATION
MESSAGING CODE /SERVICES MANAGER
SEND/RECEIVE
STATUS
RPC DISPATCH TABLE
RPC SERVICE TABLE

⋮

FIG. 14A

TIME BASE MANAGER 554
ENCRYPTION/DECRYPTION MANAGER 556
PK
BULK
KEY AND TAG MANAGER 558
KEY STORAGE IN EEPROM
KEY LOCATOR
KEY GENERATOR
CONVOLUTION ALGORITHM
SUMMARY SERVICES MANAGER 560
EVENT SUMMARIES
BUDGET SUMMARIES
DISTRIBUTER SUMMARY SERVICES
CHANNEL SERVICES MANAGER 562
CHANNEL HEADERS
CHANNEL DETAILS
LOAD MODULE EXECUTION SERVICES 568
AUTHENTICATION MANAGER/SECURE COMMUNICATION MANAGER 564
DATABASE MANAGER 566
MANAGEMENT FILE SUPPORT
TRANSACTION AND SEQUENCE NUMBER SUPPORT
SRN/ HASH
DTD INTERPRETER 590
LIBRARY ROUTINES 674
I/O CALLS (STRING SEARCH ETC.)
MISC. ITEMS THAT ARE PROBABLY LIBRARY ROUTINES
TAG CHECKING, MD5, CRC'S
INTERNAL LM'S 572 FOR BASIC METHODS
METER LOAD MODULE(S)
BILLING LOAD MODULE(S)
BUDGET LOAD MODULE(S)
AUDIT LOAD MODULE(S)
READ OBJECT LOAD MODULE(S)
WRITE OBJECT LOAD MODULE(S)
OPEN OBJECT LOAD MODULE(S)
CLOSE OBJECT LOAD MODULE(S)

⋮

FIG. 14B

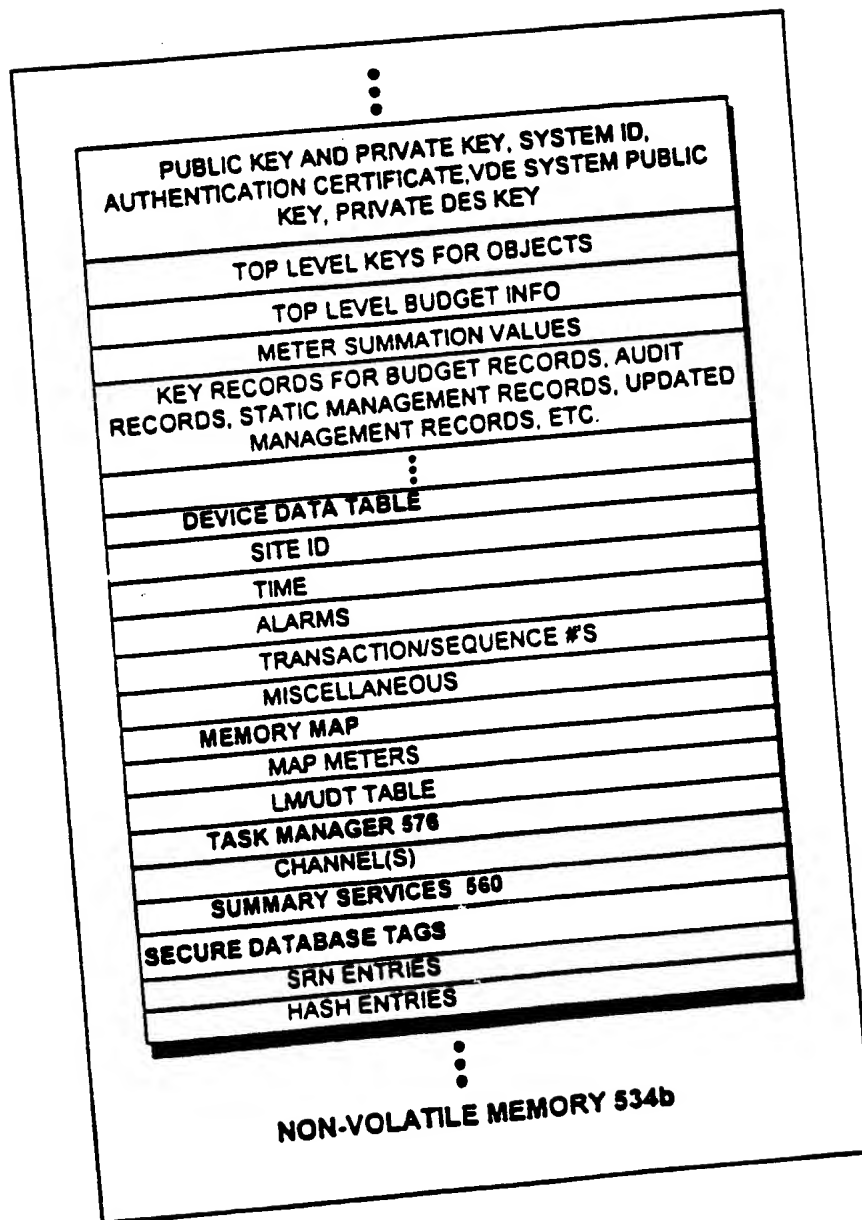
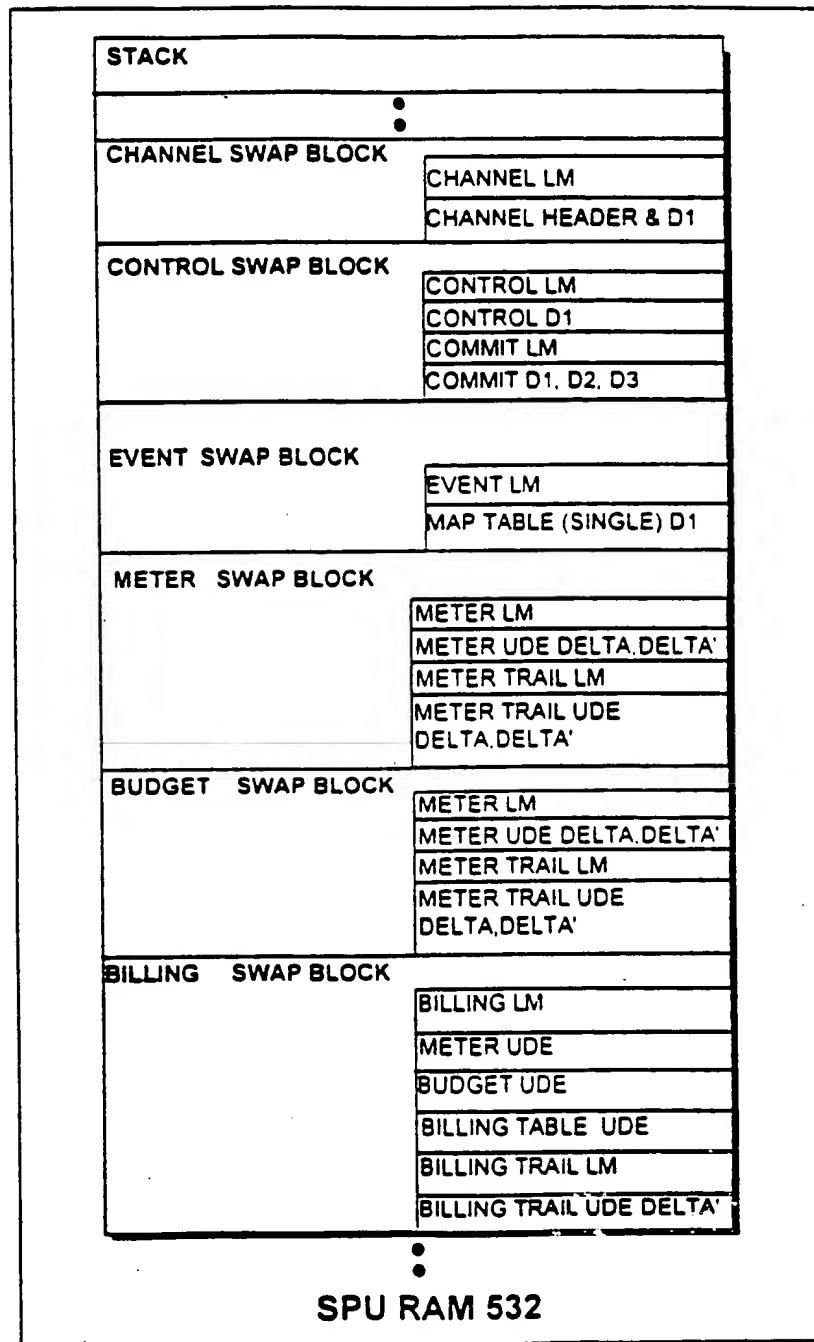


FIG. 14C



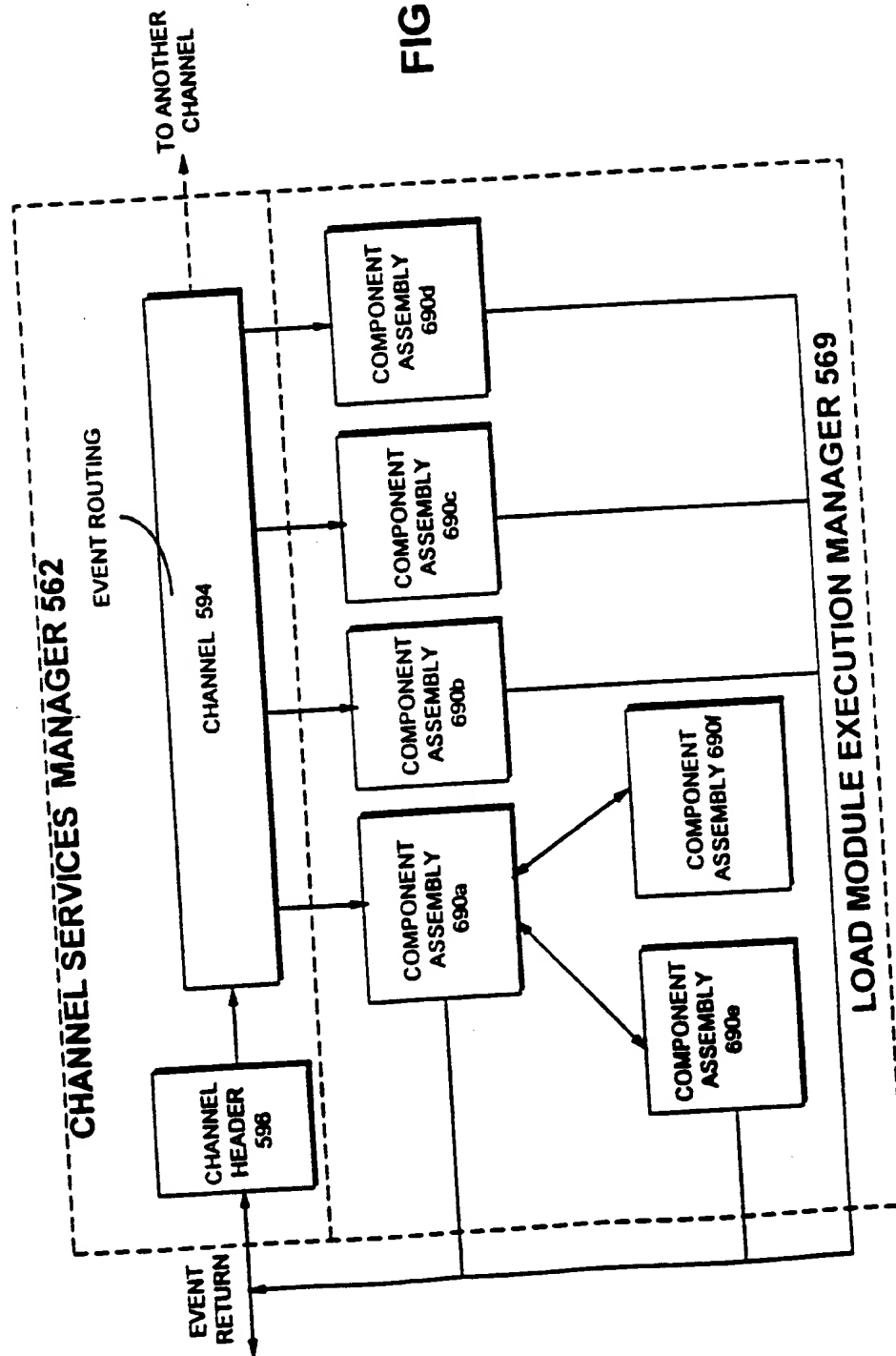


FIG. 15

FIG. 15A

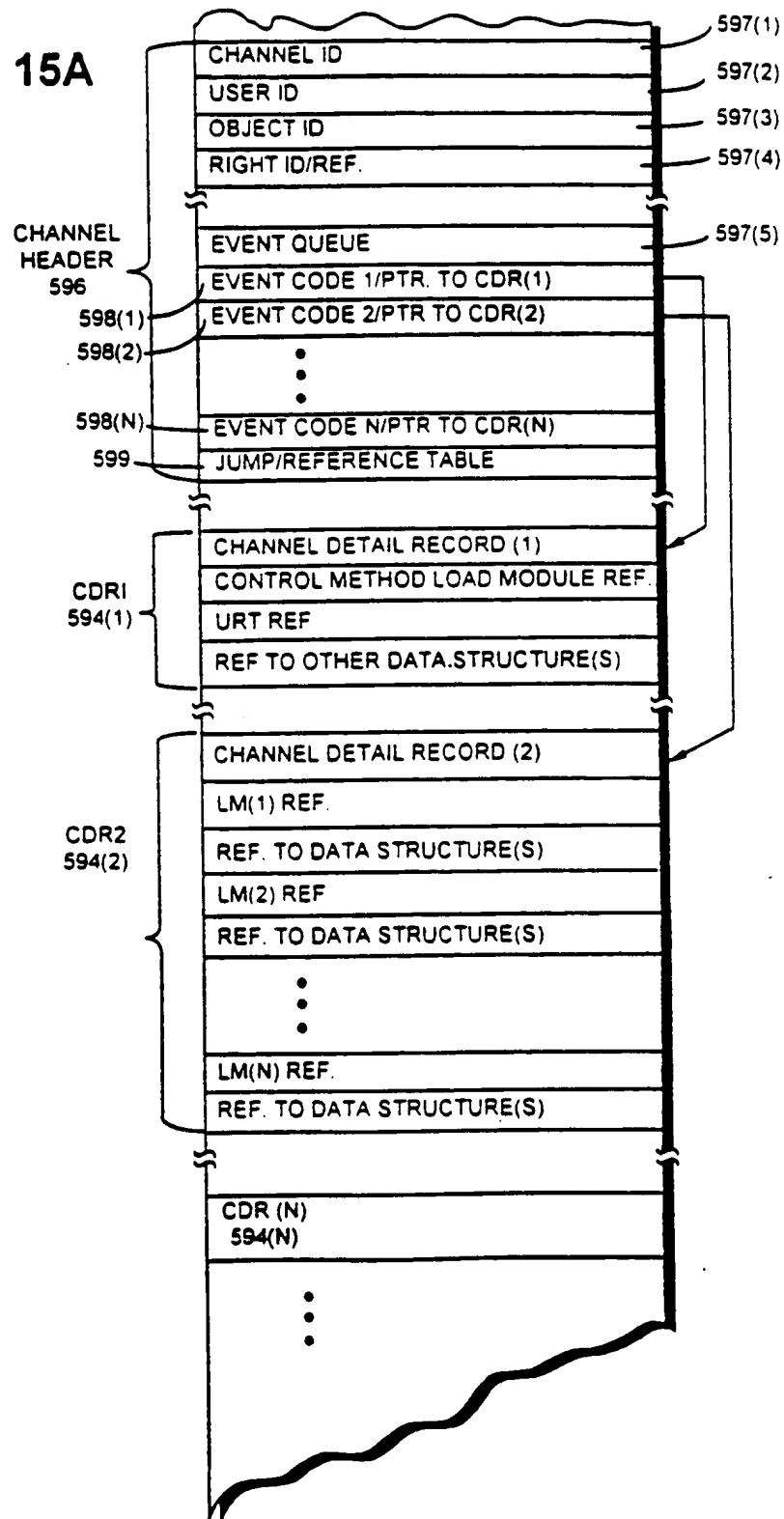


FIG. 15B

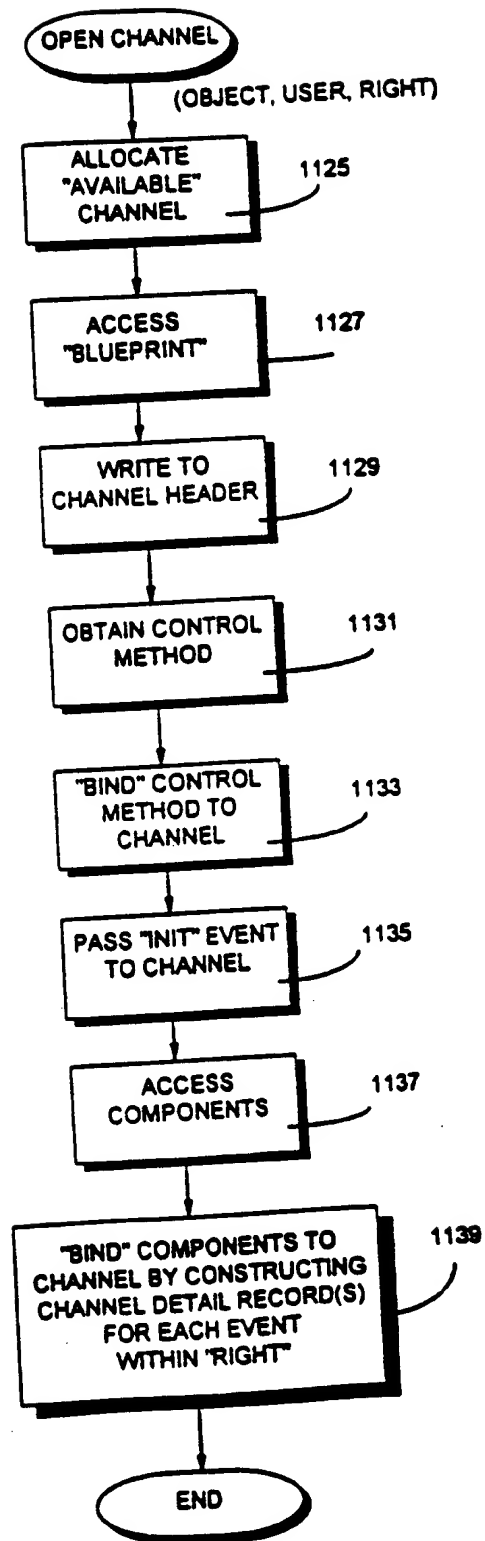
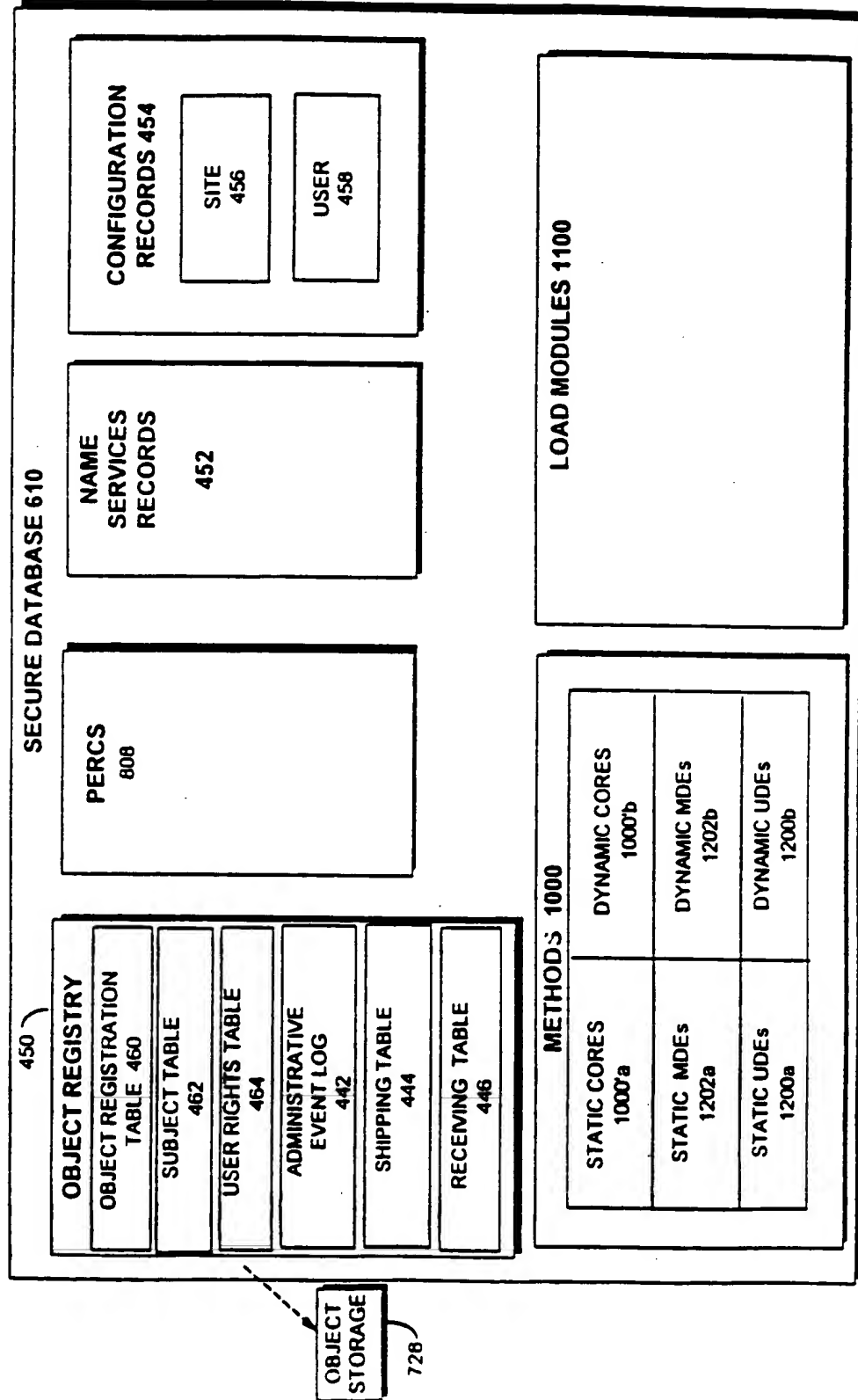
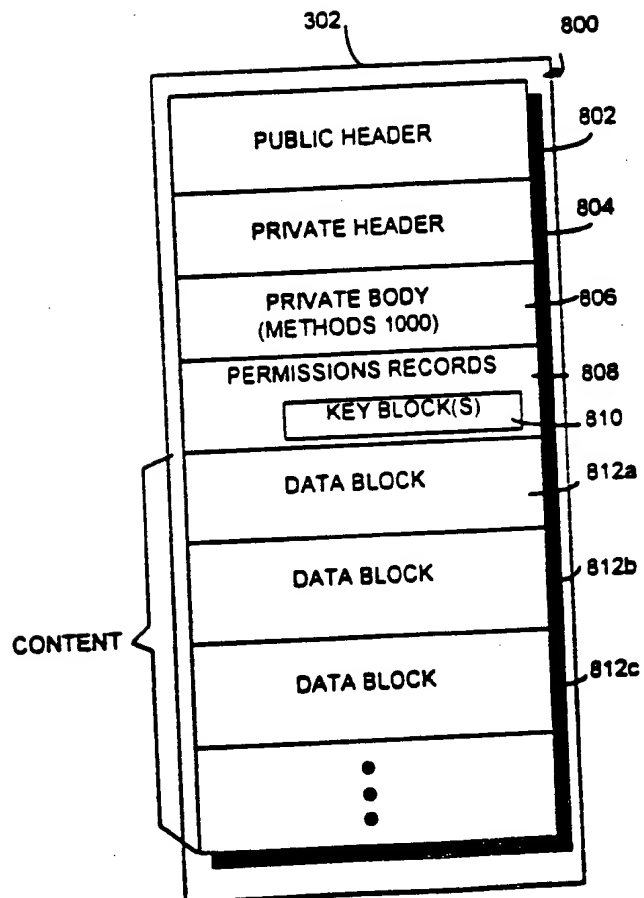


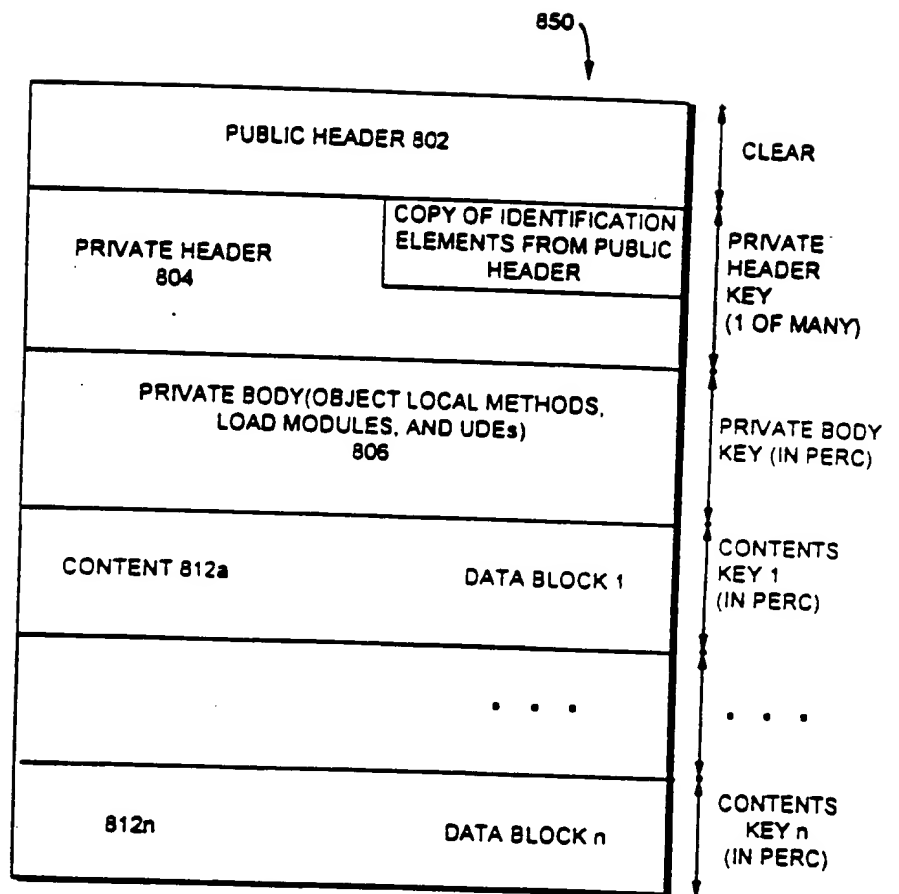
FIG. 16





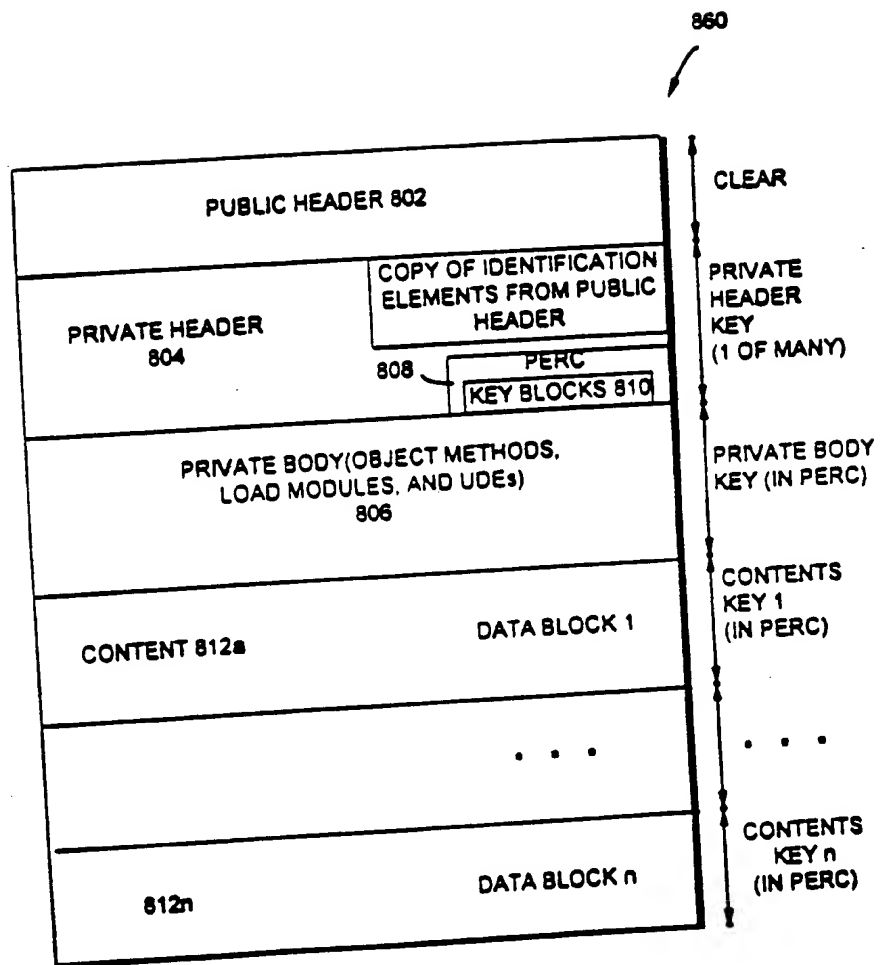
LOGICAL OBJECT

FIG. 17



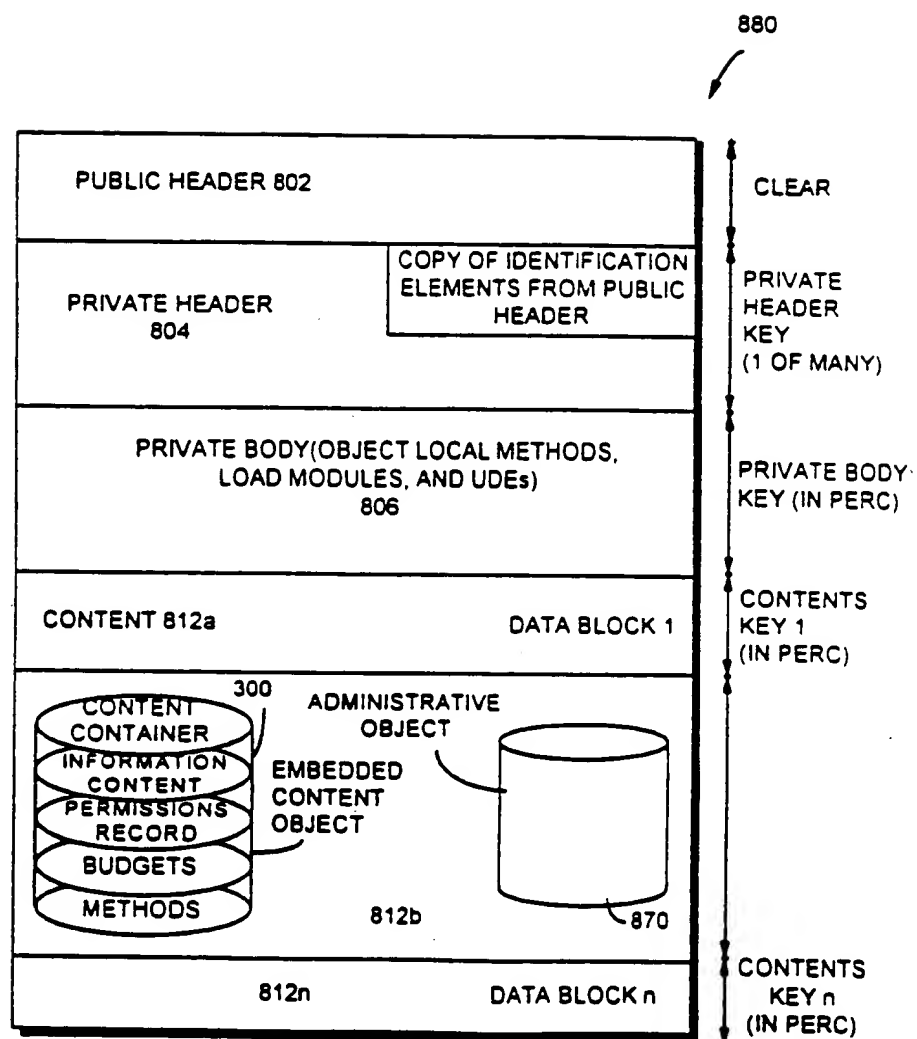
STATIONARY OBJECT

FIG. 18



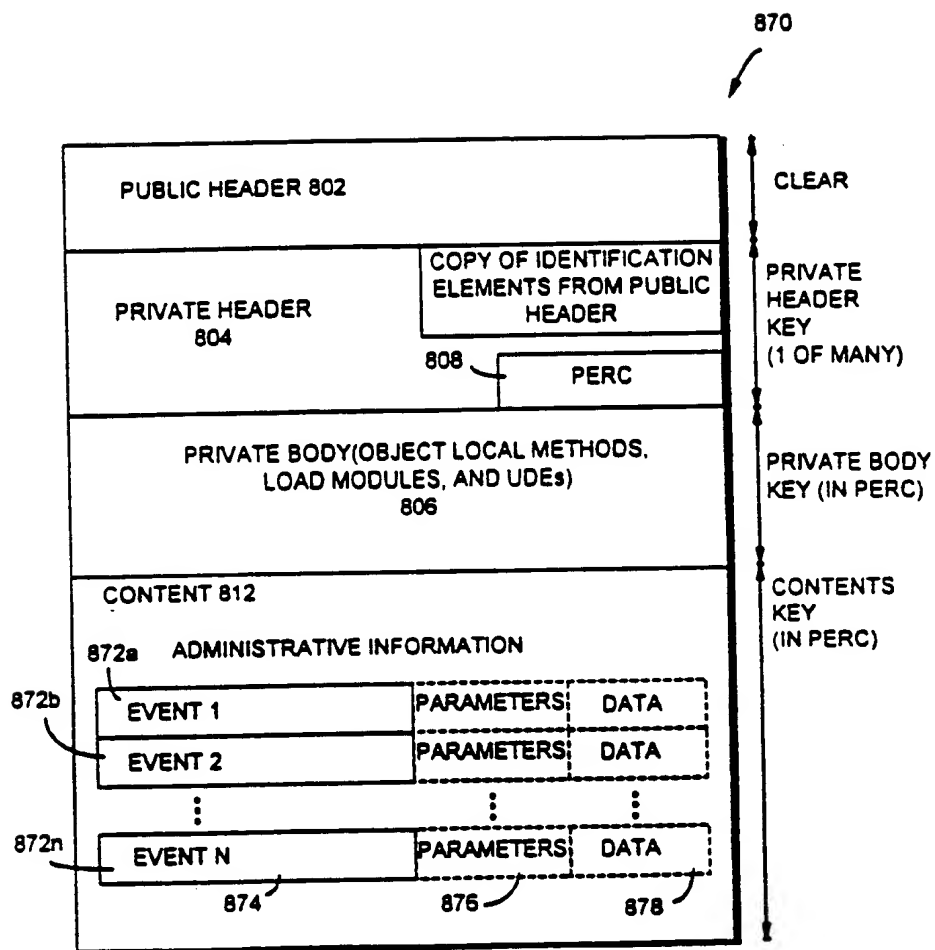
TRAVELING OBJECT

FIG. 19



CONTENT OBJECT

FIG. 20



ADMINISTRATIVE OBJECT

FIG. 21

FIG. 22

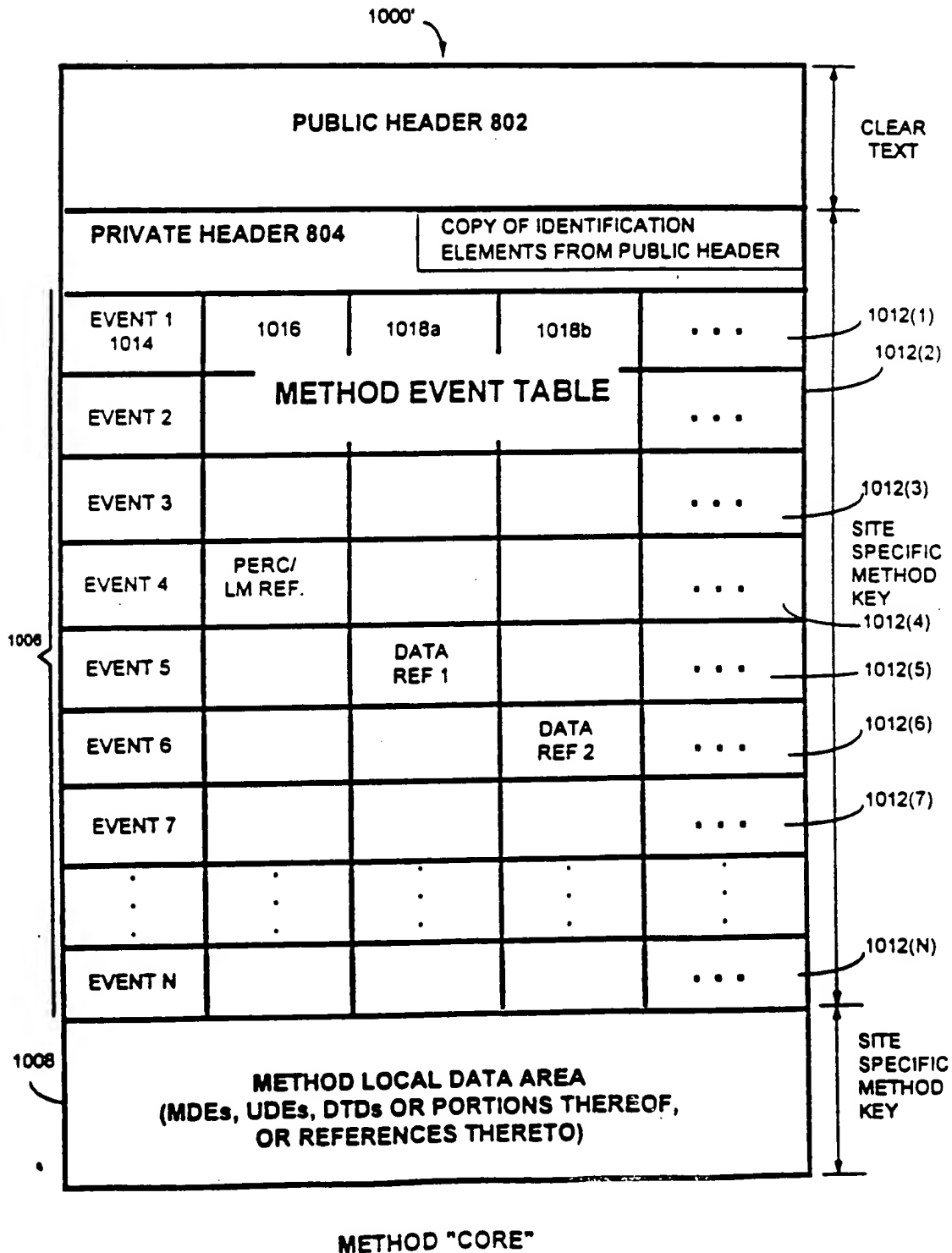
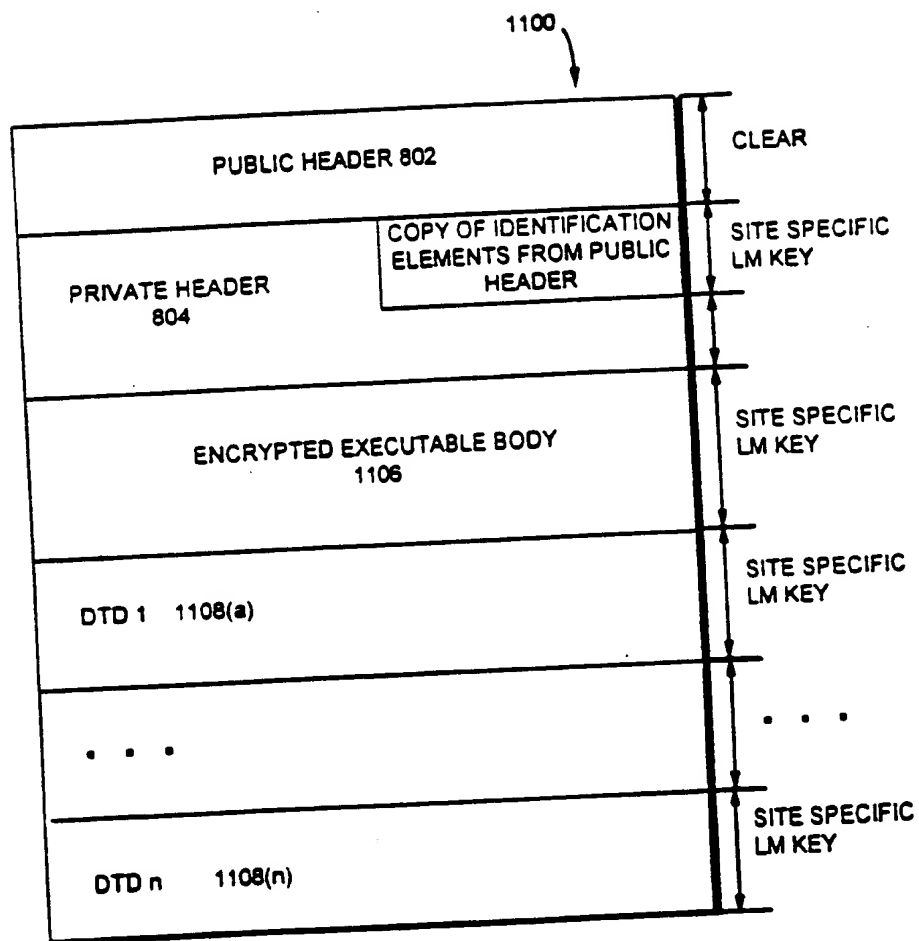


FIG. 23



LOAD MODULE

FIG. 24

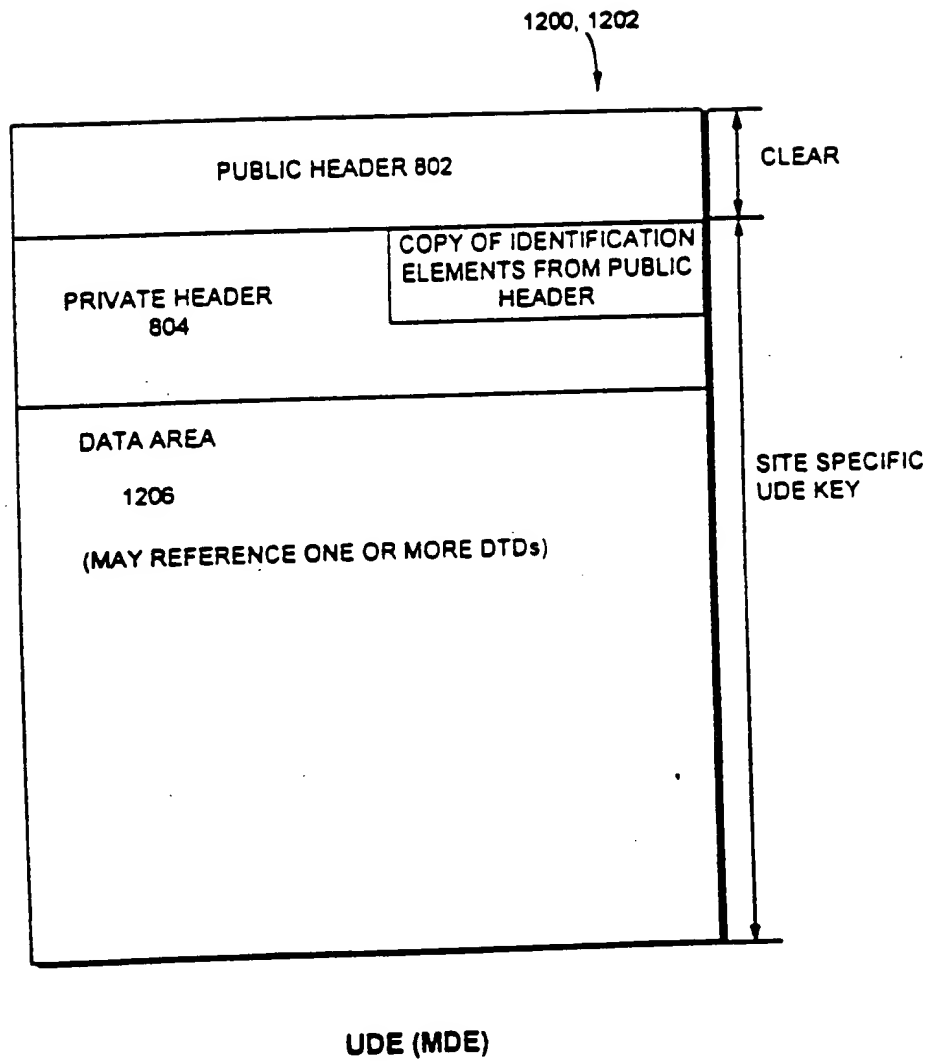


FIG. 25A

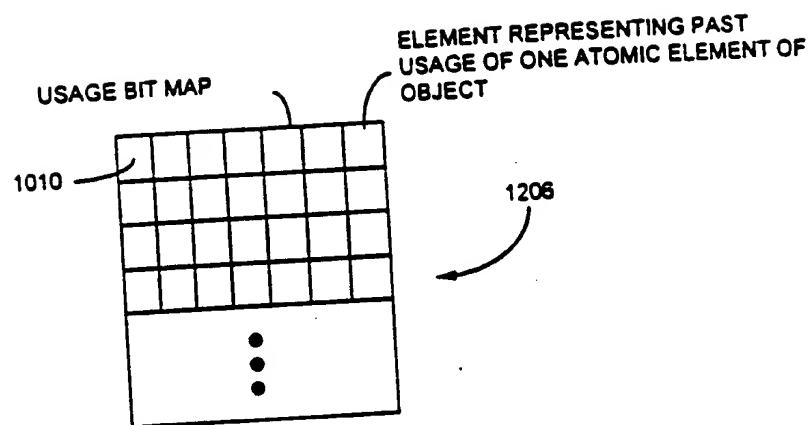


FIG. 25B

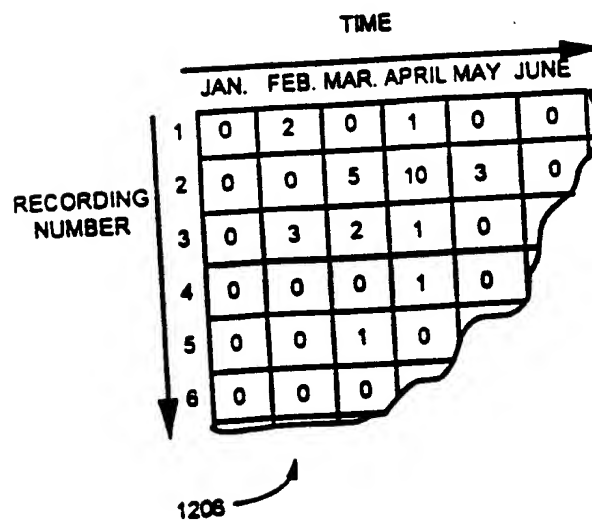


FIG. 25C

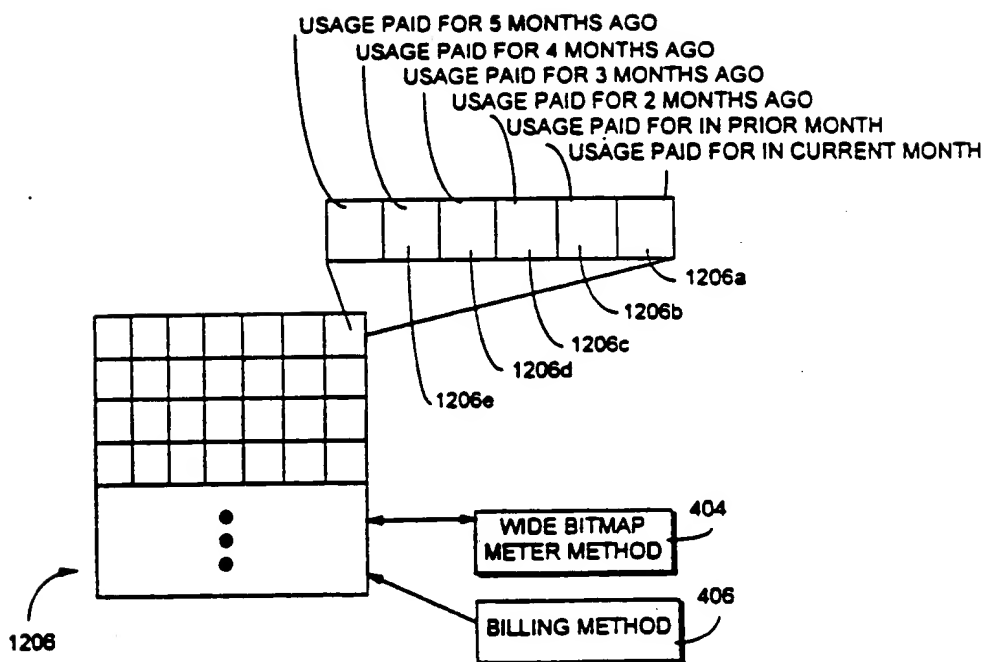


FIG. 25C

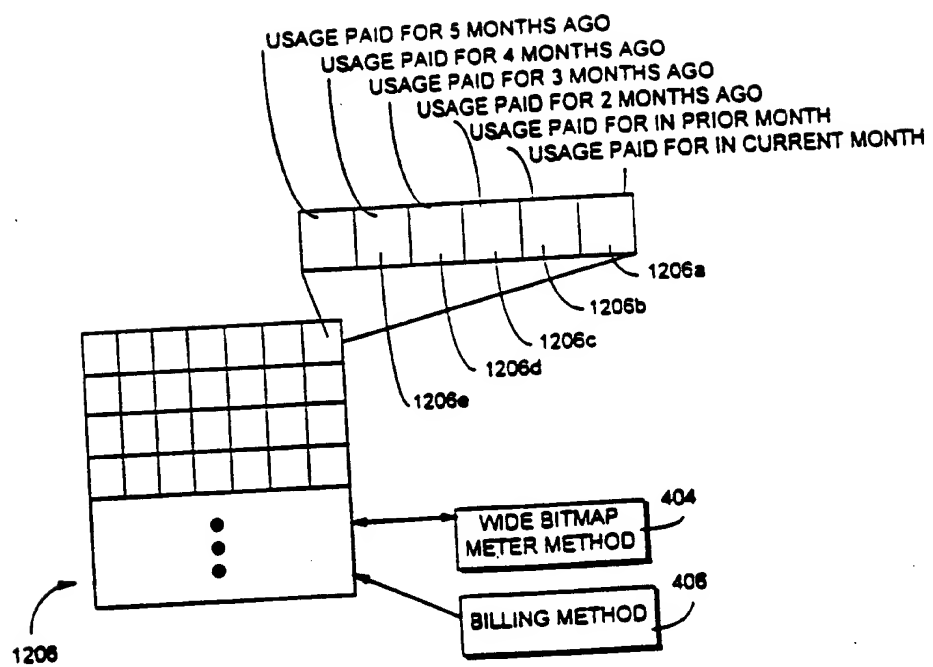


FIG. 26

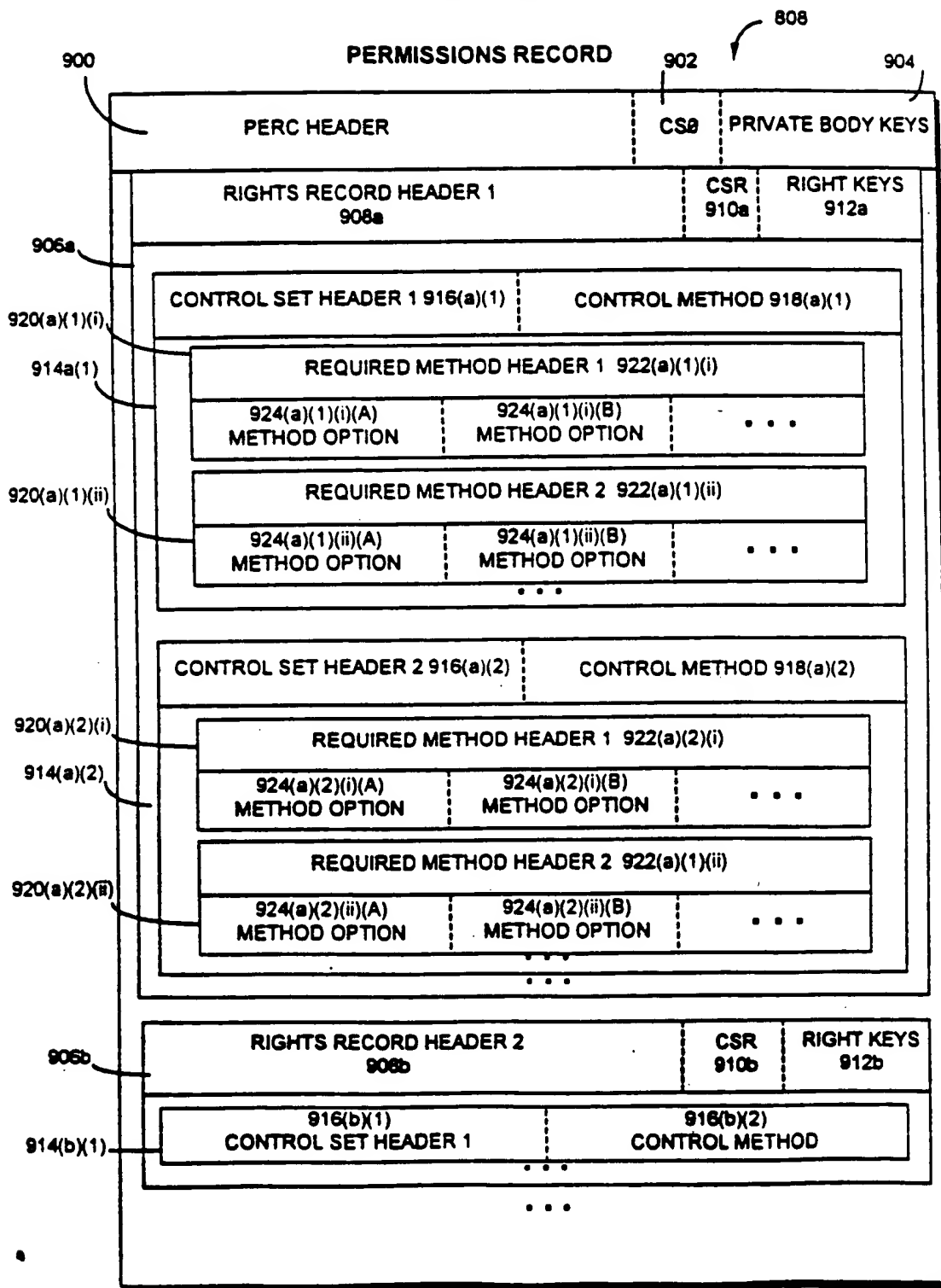


FIG. 26A

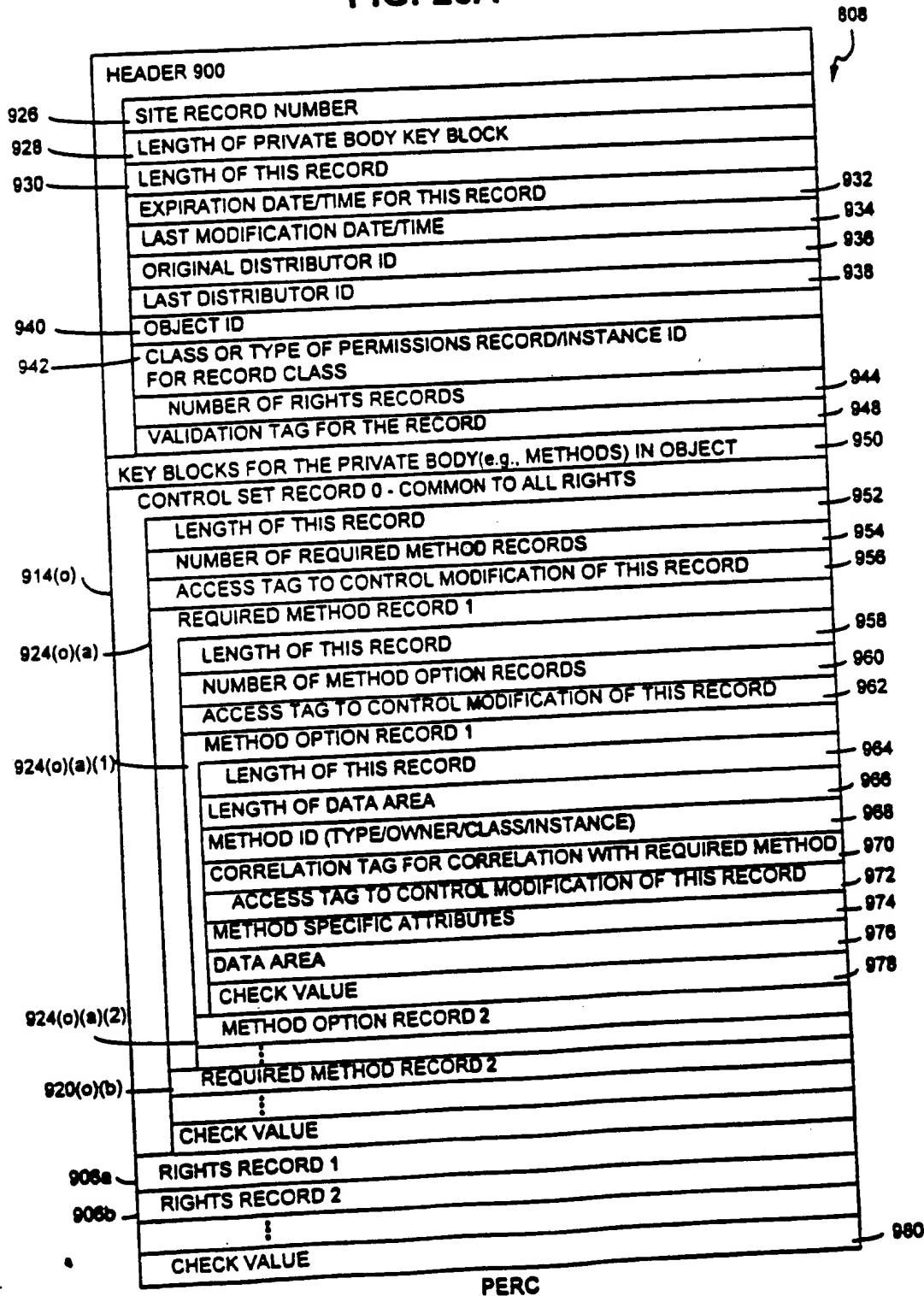


FIG. 26B

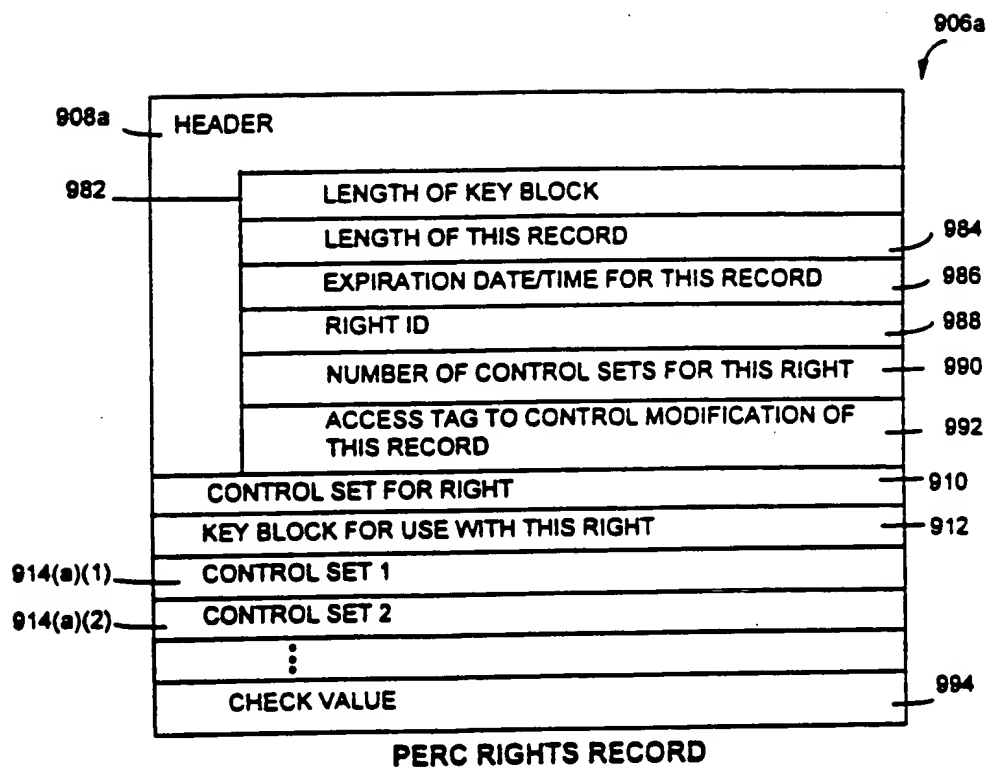


FIG. 27
SHIPPING TABLE

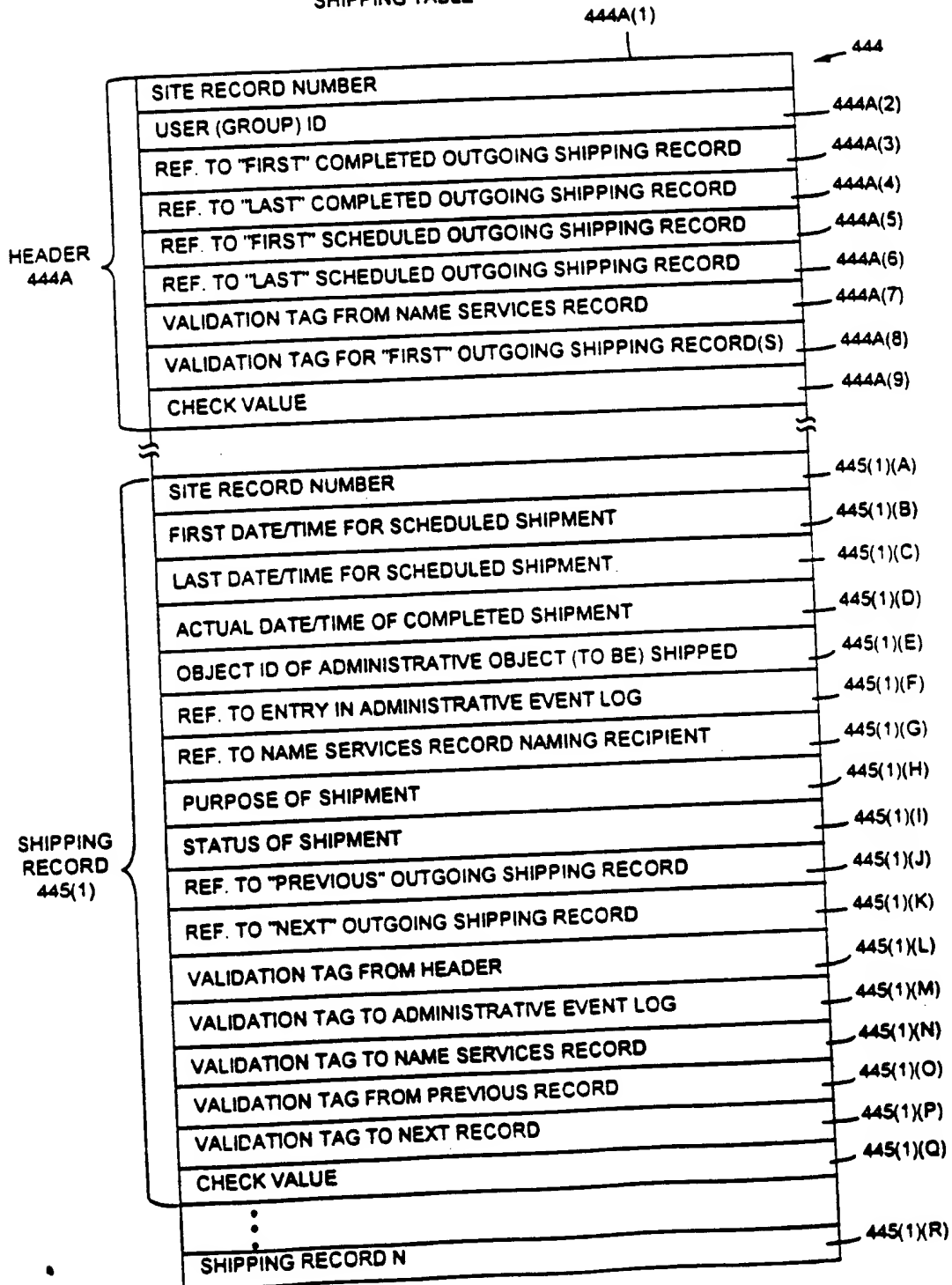


FIG. 28
RECEIVING TABLE

		446A(1)	
HEADER 446A	SITE RECORD NUMBER		446
	USER (GROUP) ID		446A(2)
	REF. TO "FIRST" COMPLETED INCOMING RECEIVING RECORD		446A(3)
	REF. TO "LAST" COMPLETED INCOMING RECEIVING RECORD		446A(4)
	REF. TO "FIRST" SCHEDULED INCOMING RECEIVING RECORD		446A(5)
	REF. TO "LAST" SCHEDULED INCOMING RECEIVING RECORD		446A(6)
	VALIDATION TAG FROM NAME SERVICES RECORD		446A(7)
	VALIDATION TAG FOR "FIRST" INCOMING RECEIVING RECORD(S)		446A(8)
	CHECK VALUE		446A(9)
RECEIVING RECORD 447(1)	SITE RECORD NUMBER		447(1)(A)
	FIRST DATE/TIME FOR SCHEDULED RECEPTION		447(1)(B)
	LAST DATE/TIME FOR SCHEDULED RECEPTION		447(1)(C)
	ACTUAL DATE/TIME OF COMPLETED RECEPTION		447(1)(D)
	OBJECT ID OF ADMINISTRATIVE OBJECT (TO BE) RECEIVED		447(1)(E)
	REF. TO ENTRY IN ADMINISTRATIVE EVENT LOG		447(1)(F)
	REF. TO NAME SERVICES RECORD NAMING SENDER		447(1)(G)
	PURPOSE OF RECEPTION		447(1)(H)
	STATUS OF RECEPTION		447(1)(I)
	REF. TO "PREVIOUS" INCOMING RECEIVING RECORD		447(1)(J)
	REF. TO "NEXT" INCOMING RECEIVING RECORD		447(1)(K)
	VALIDATION TAGS		447(1)(L)
	CHECK VALUE		447(1)(M)
	⋮		
	RECEIVING RECORD N		447(2)

FIG. 29
ADMINISTRATIVE EVENT LOG

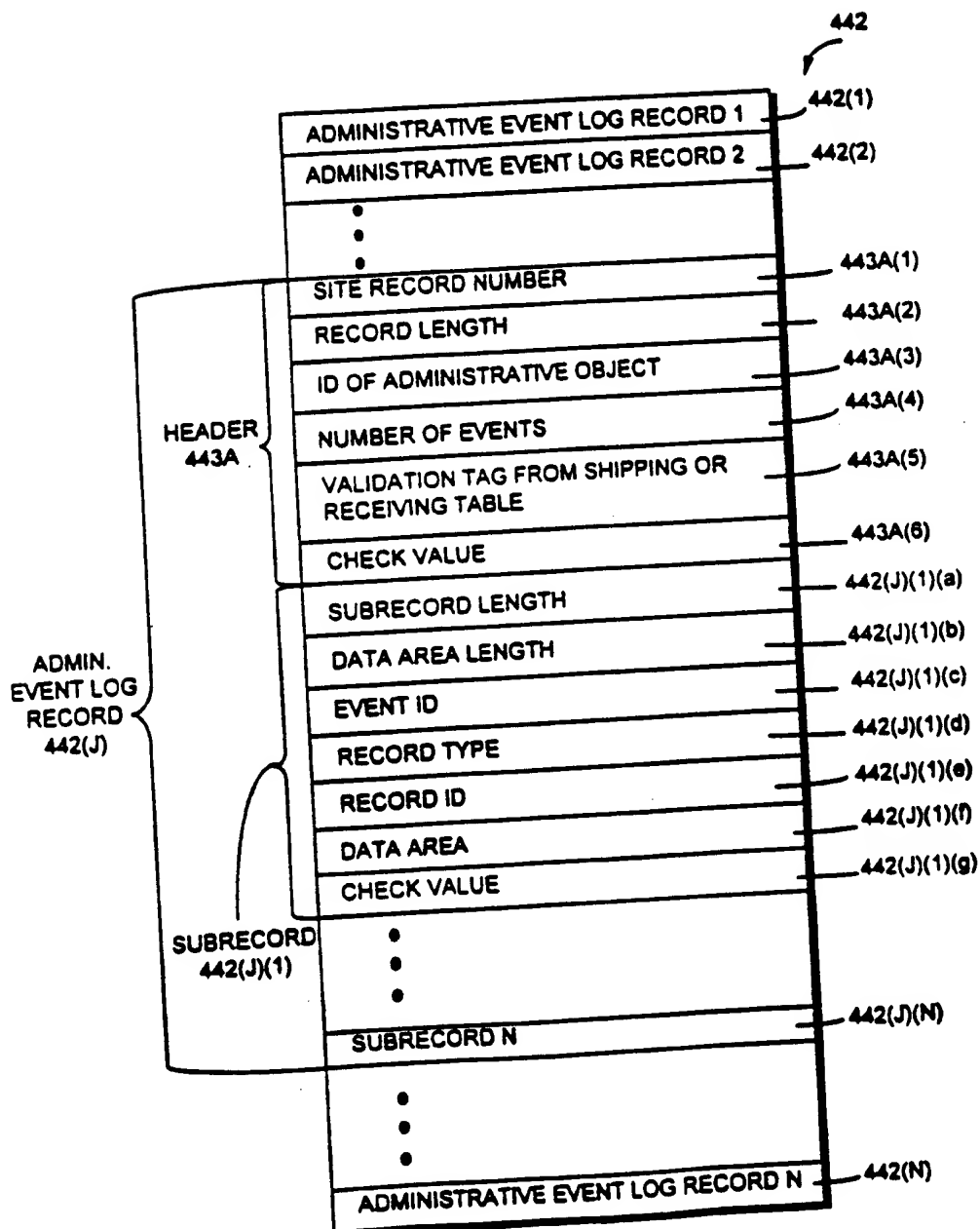
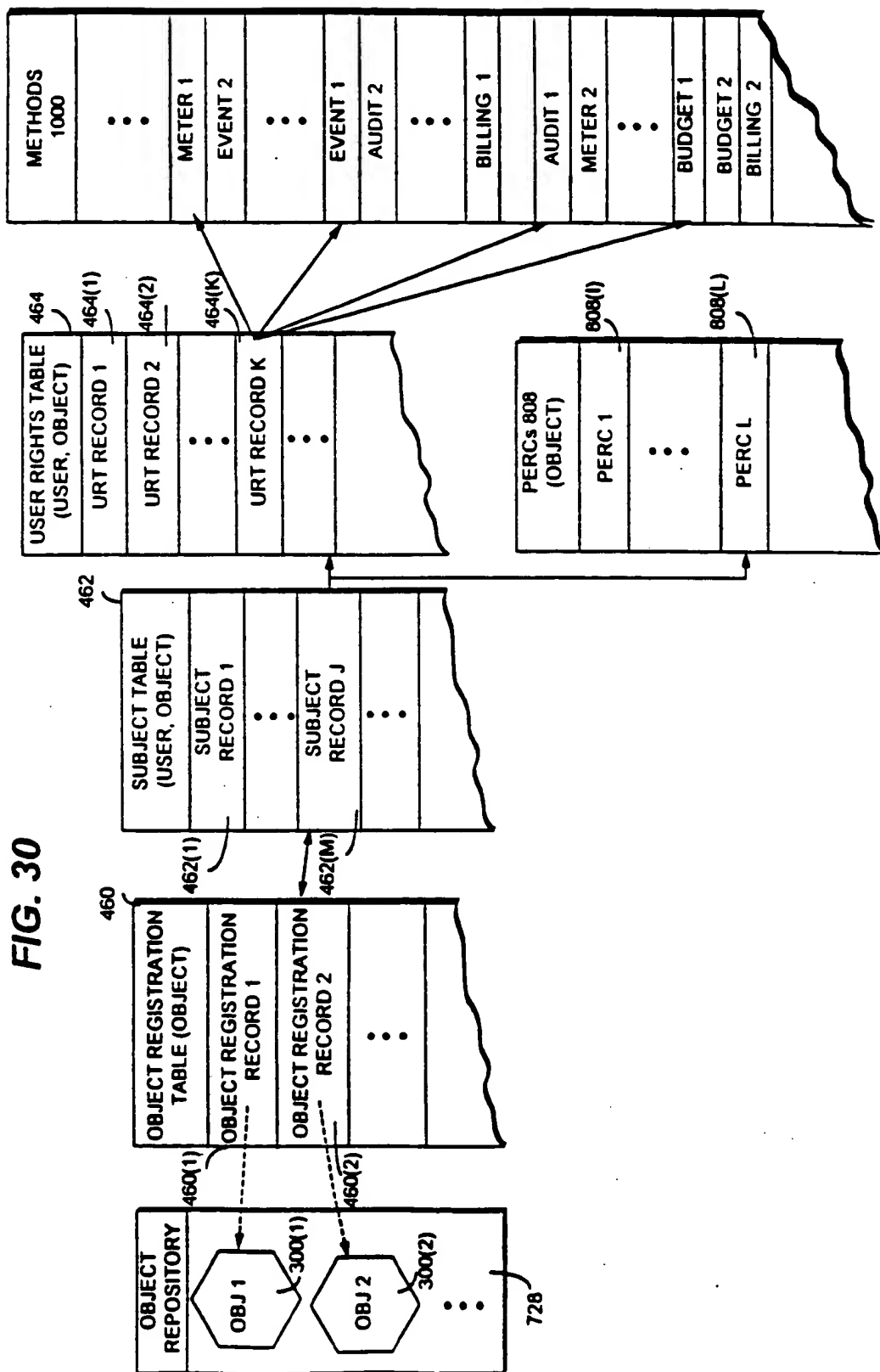


FIG. 30



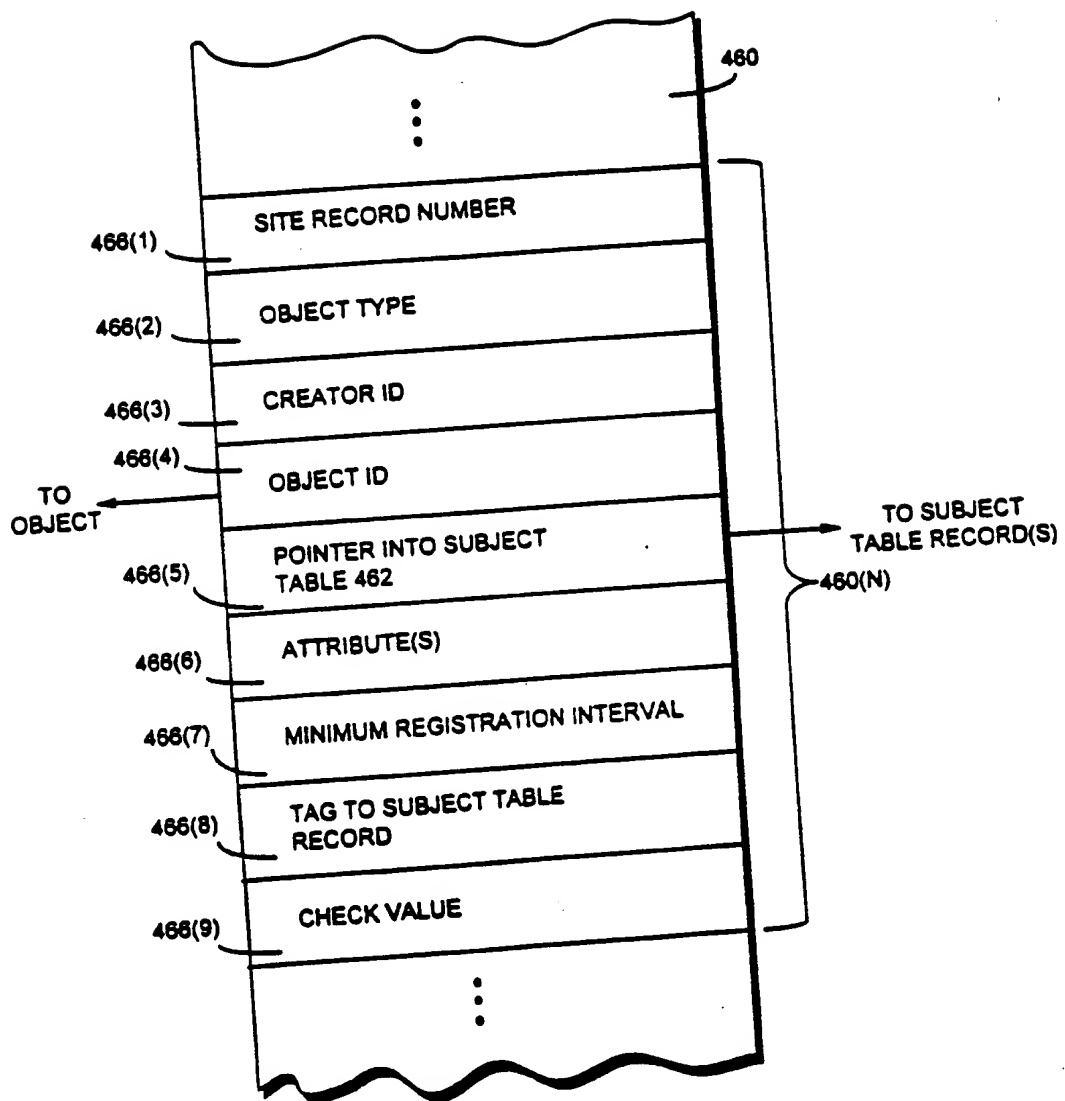


FIG. 31
OBJECT REGISTRATION TABLE

FIG. 32

SUBJECT
TABLE

"HEADER"
468

SUBJECT
RECORD
470(1)

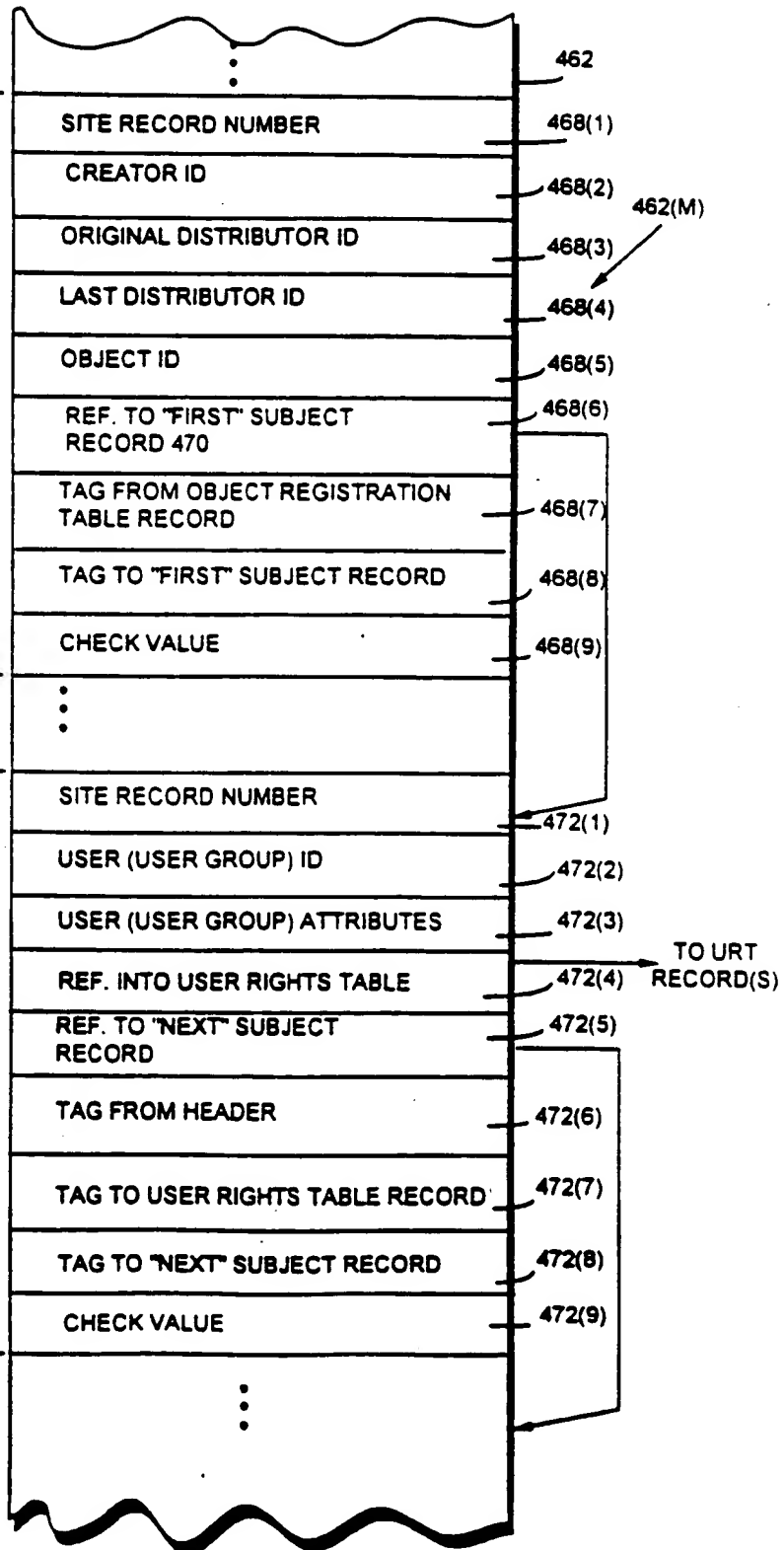


FIG. 33 USER RIGHTS TABLE

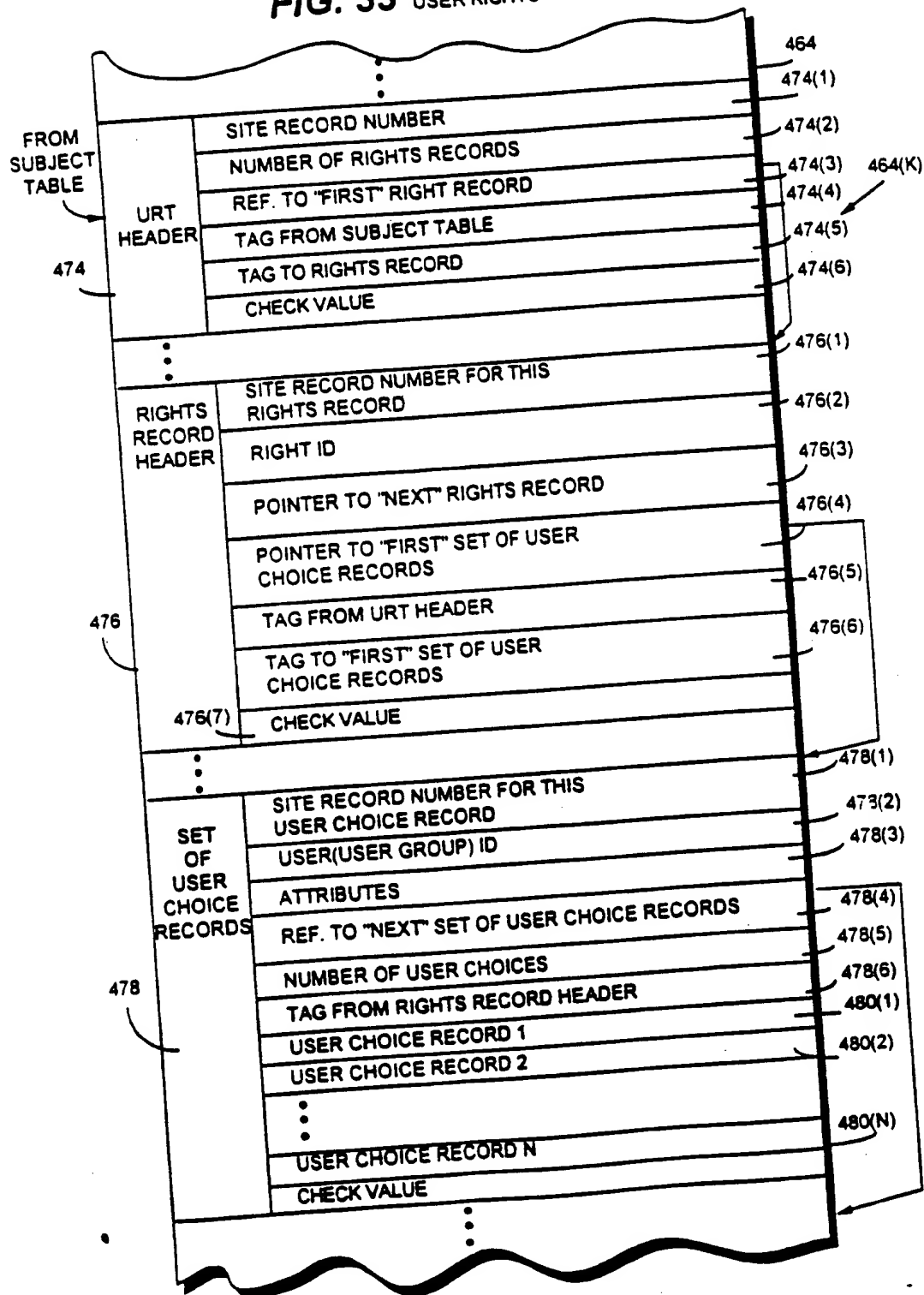


FIG. 34

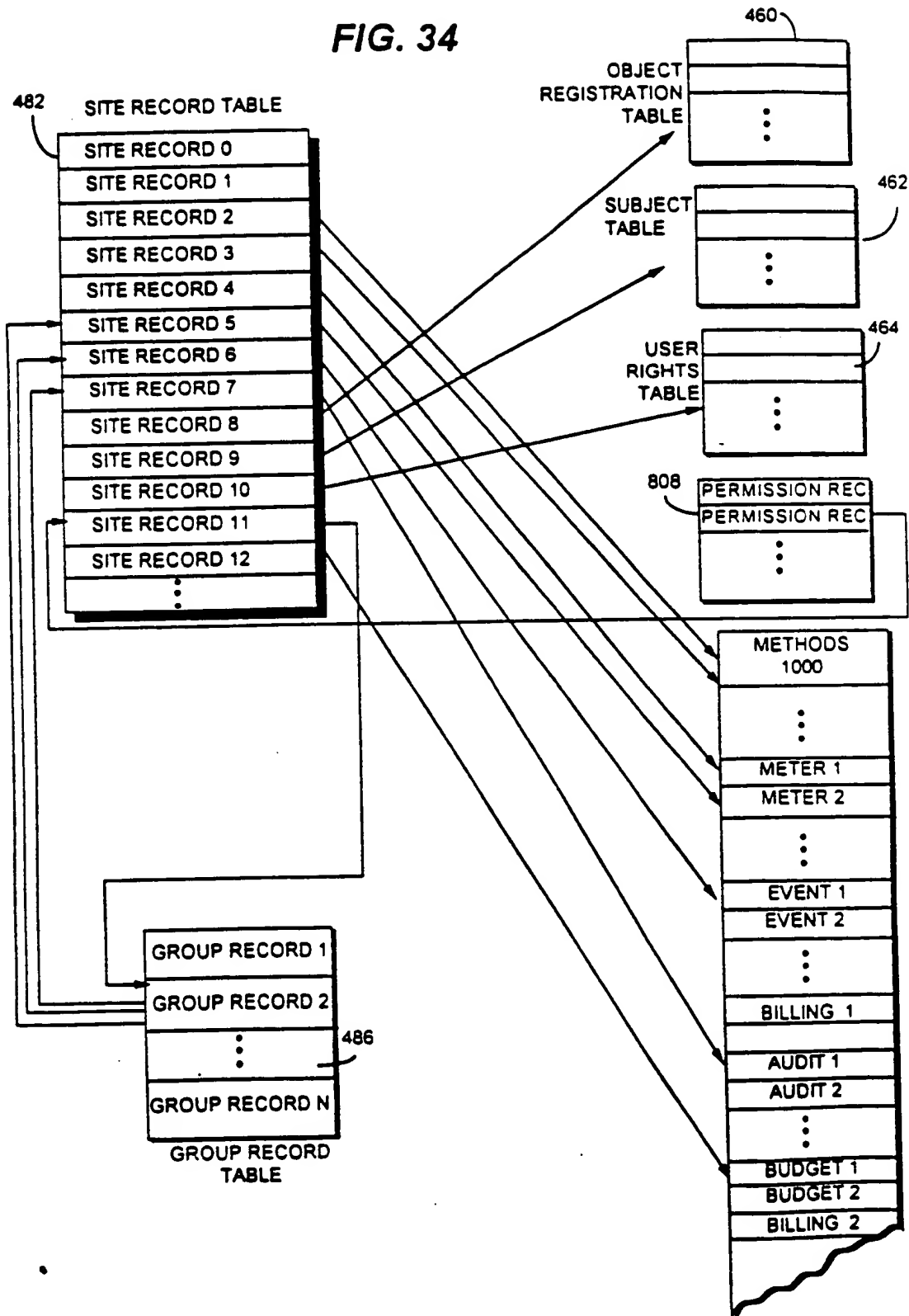


FIG. 34A

SITE RECORD

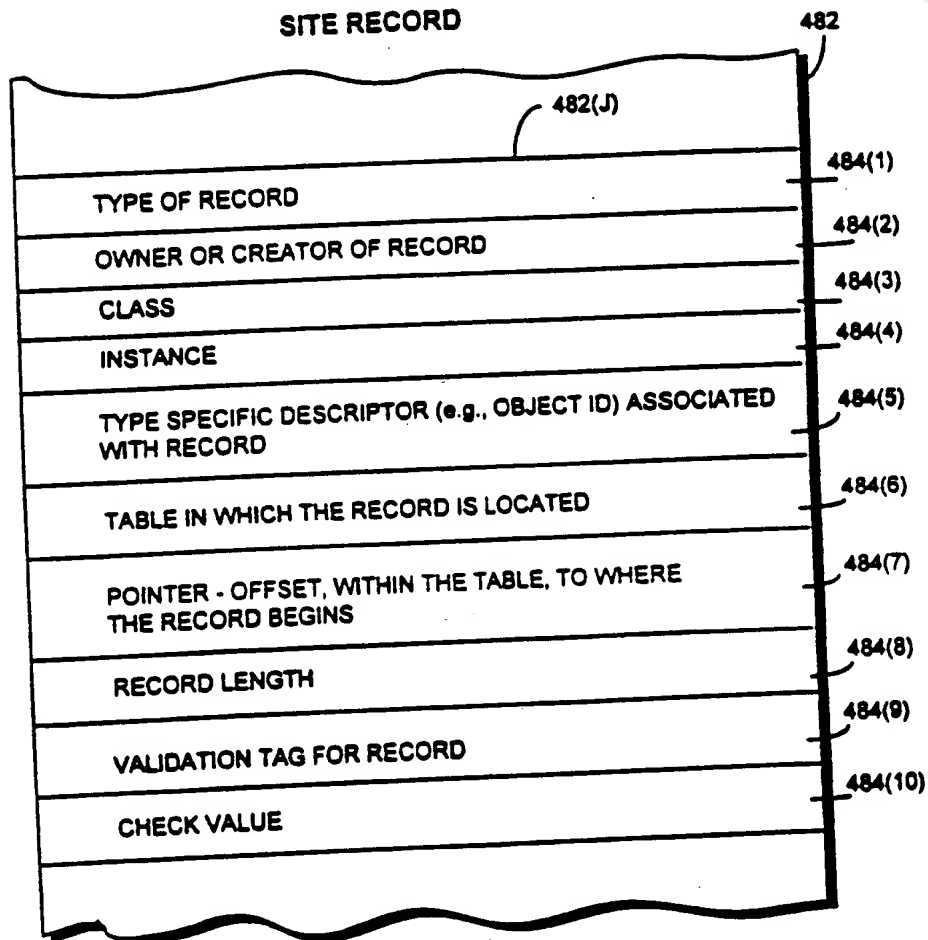


FIG. 34B

GROUP RECORD

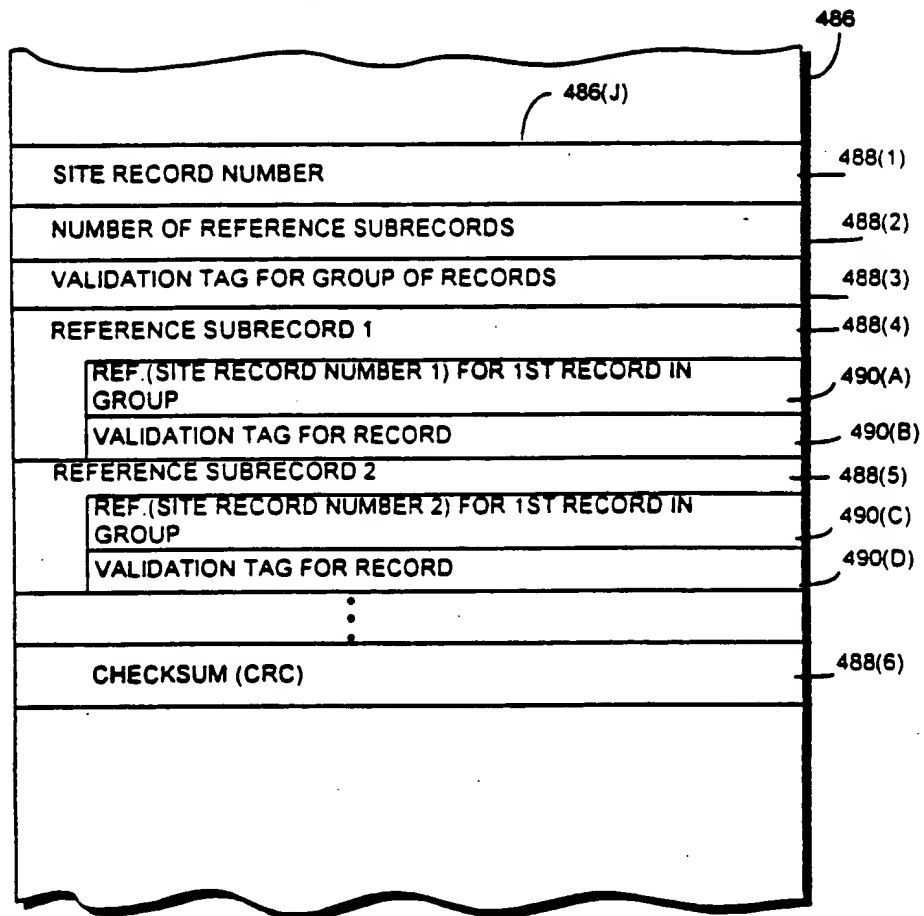


FIG. 35

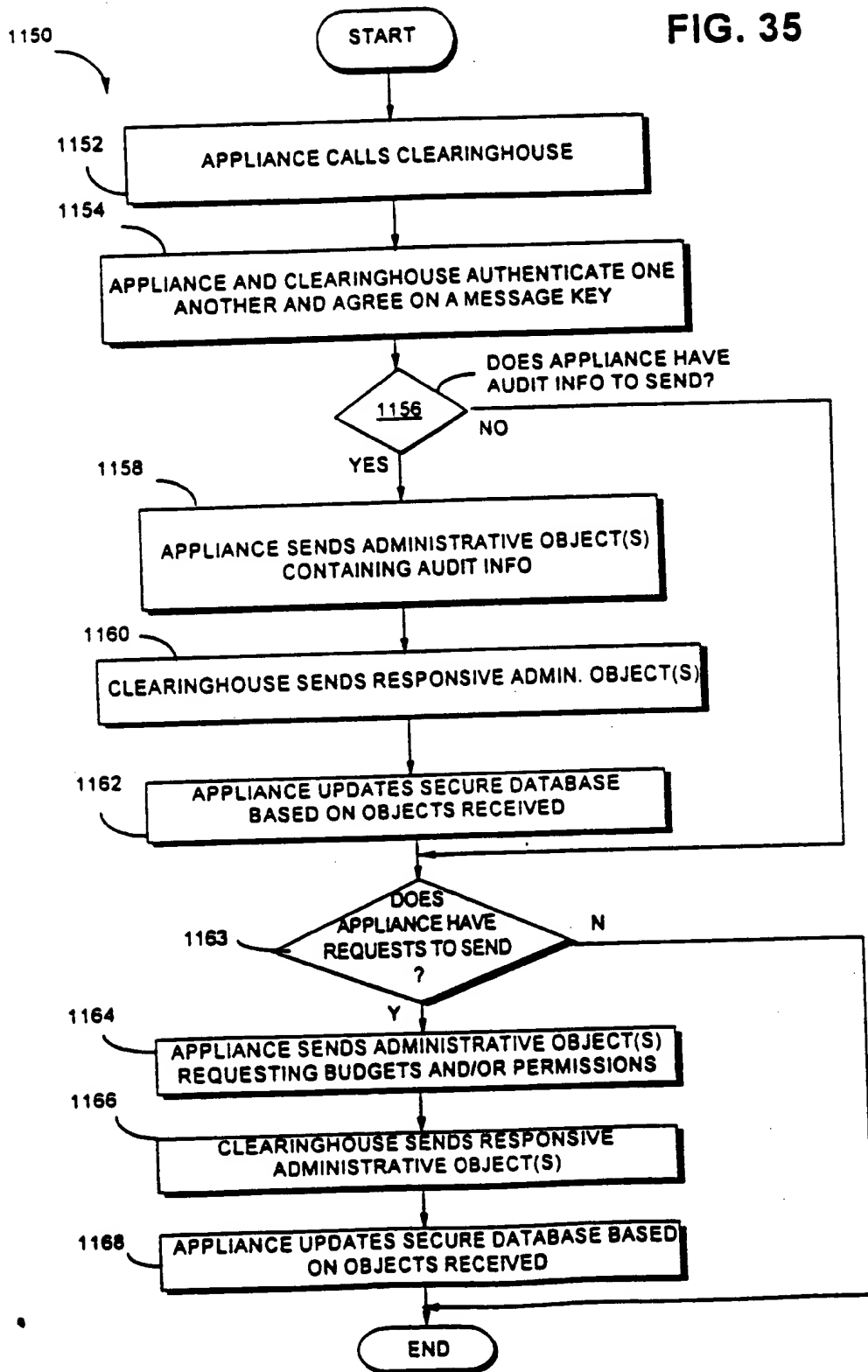


FIG. 36

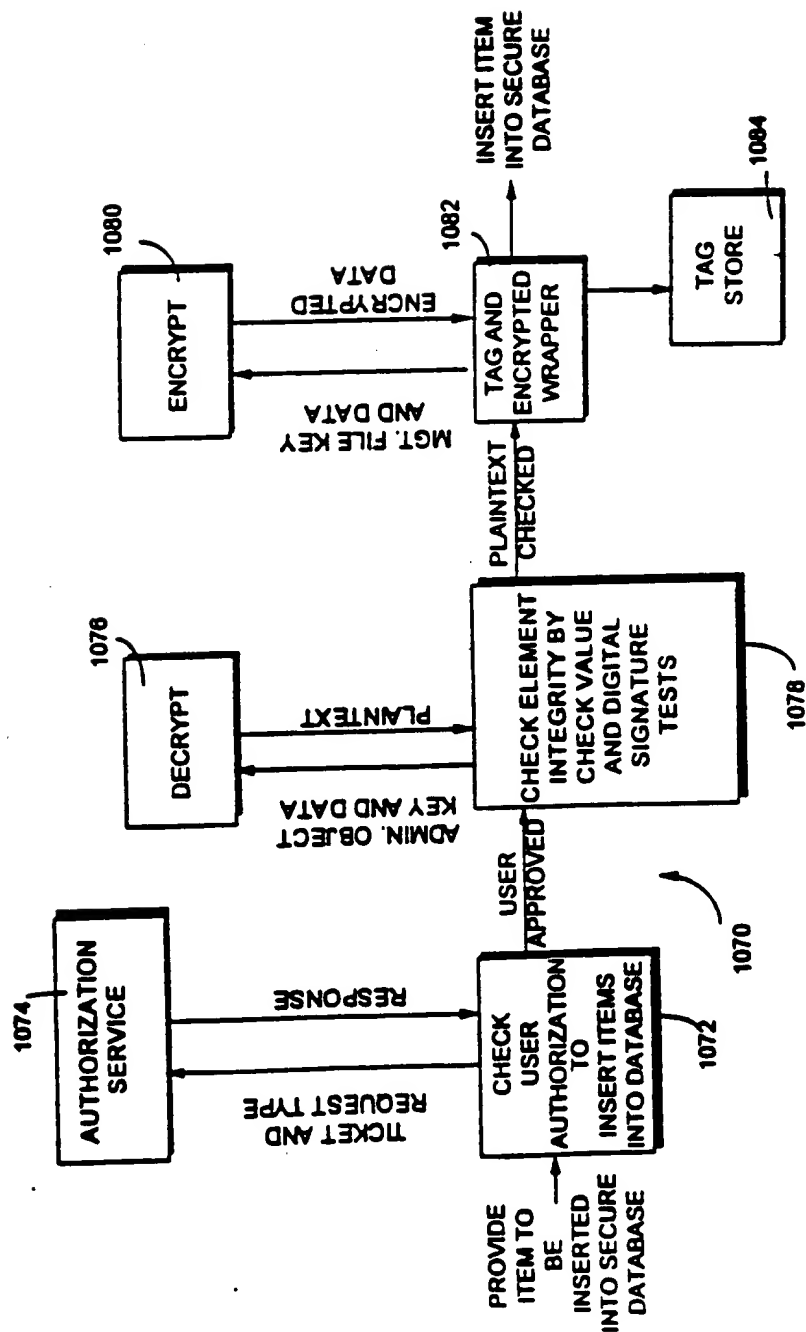


FIG. 37

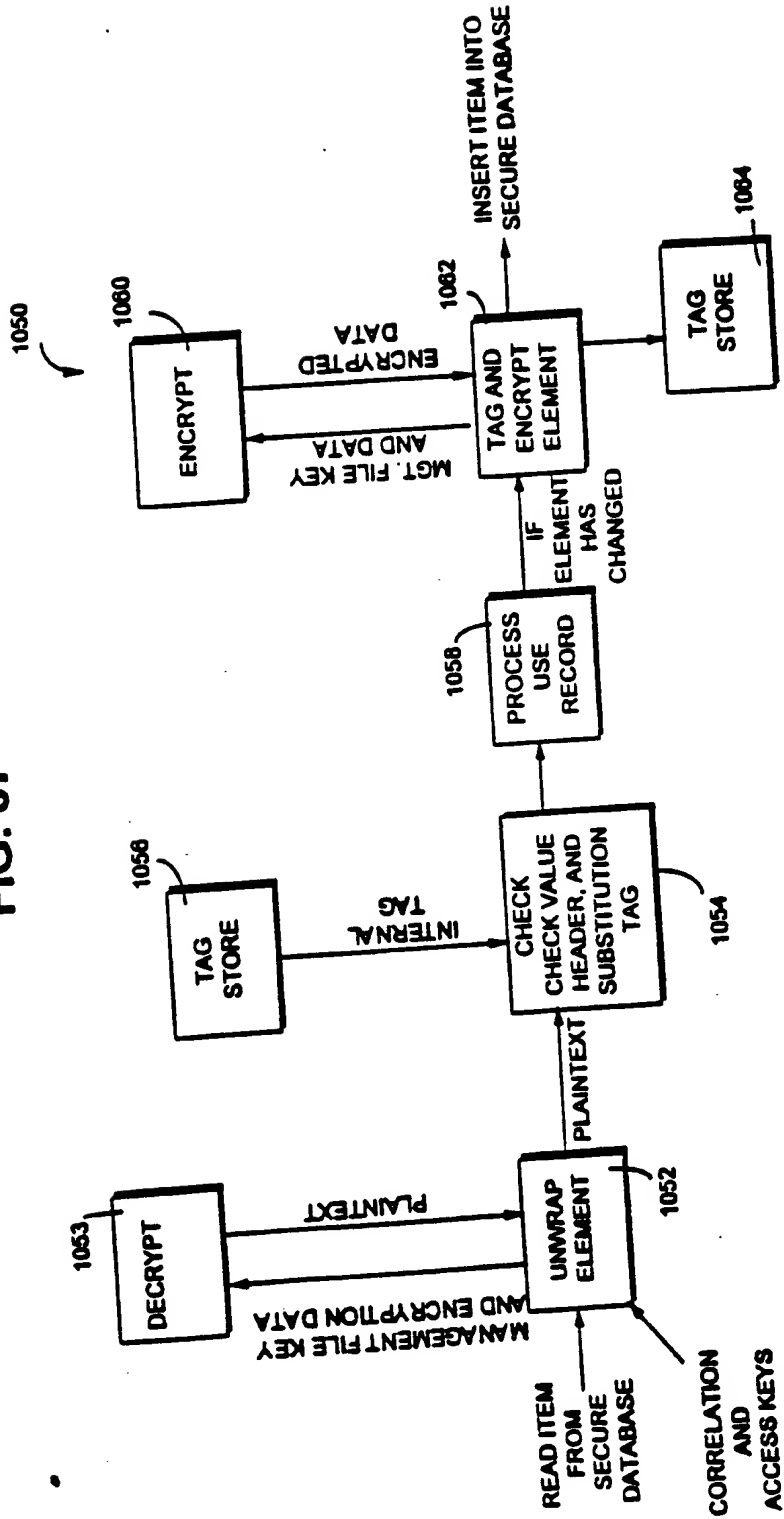


FIG. 38

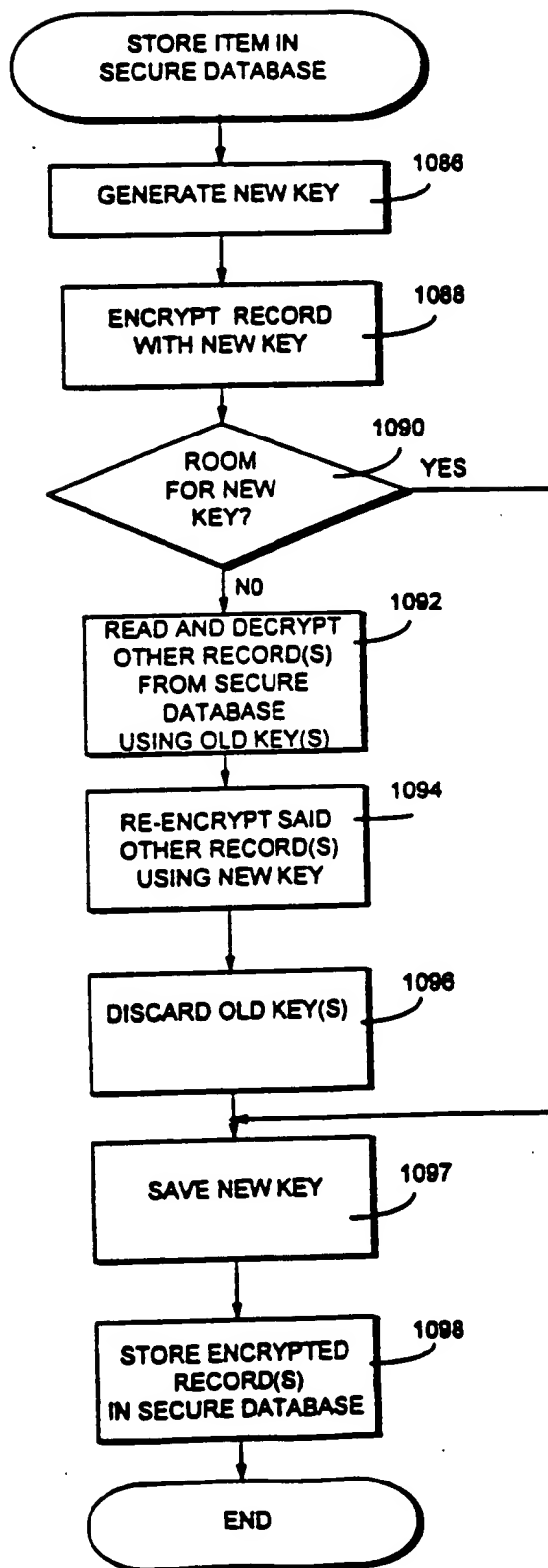


FIG. 39
BACKUP

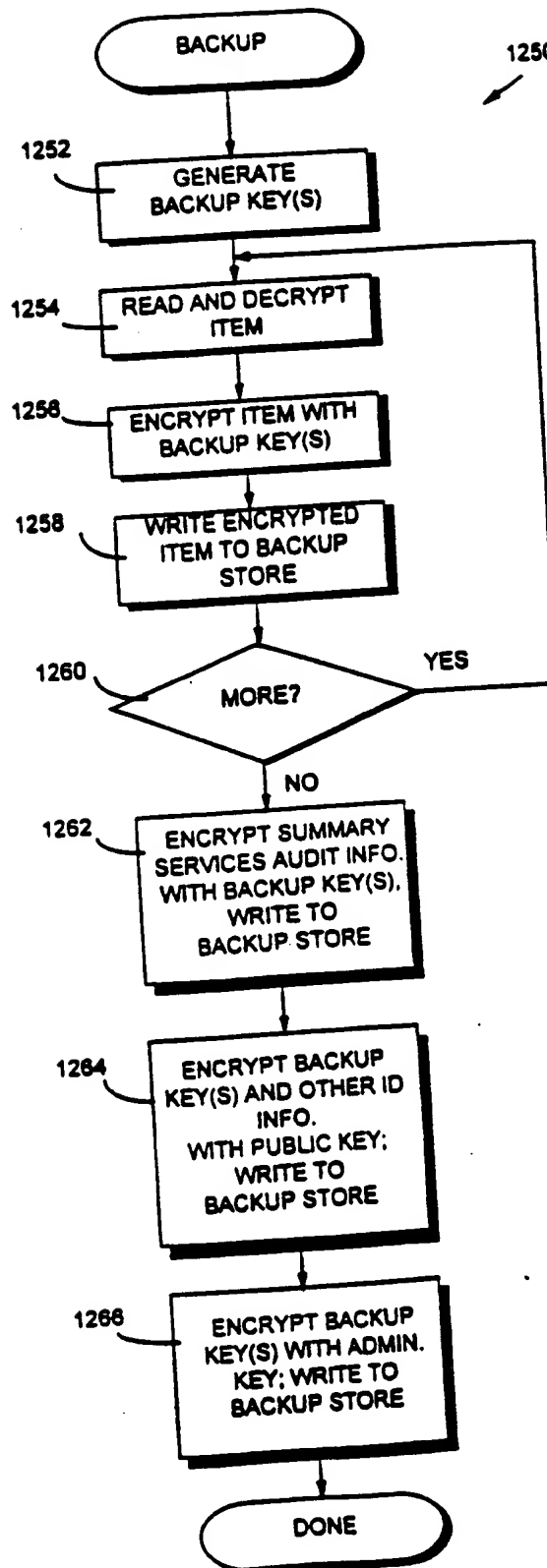
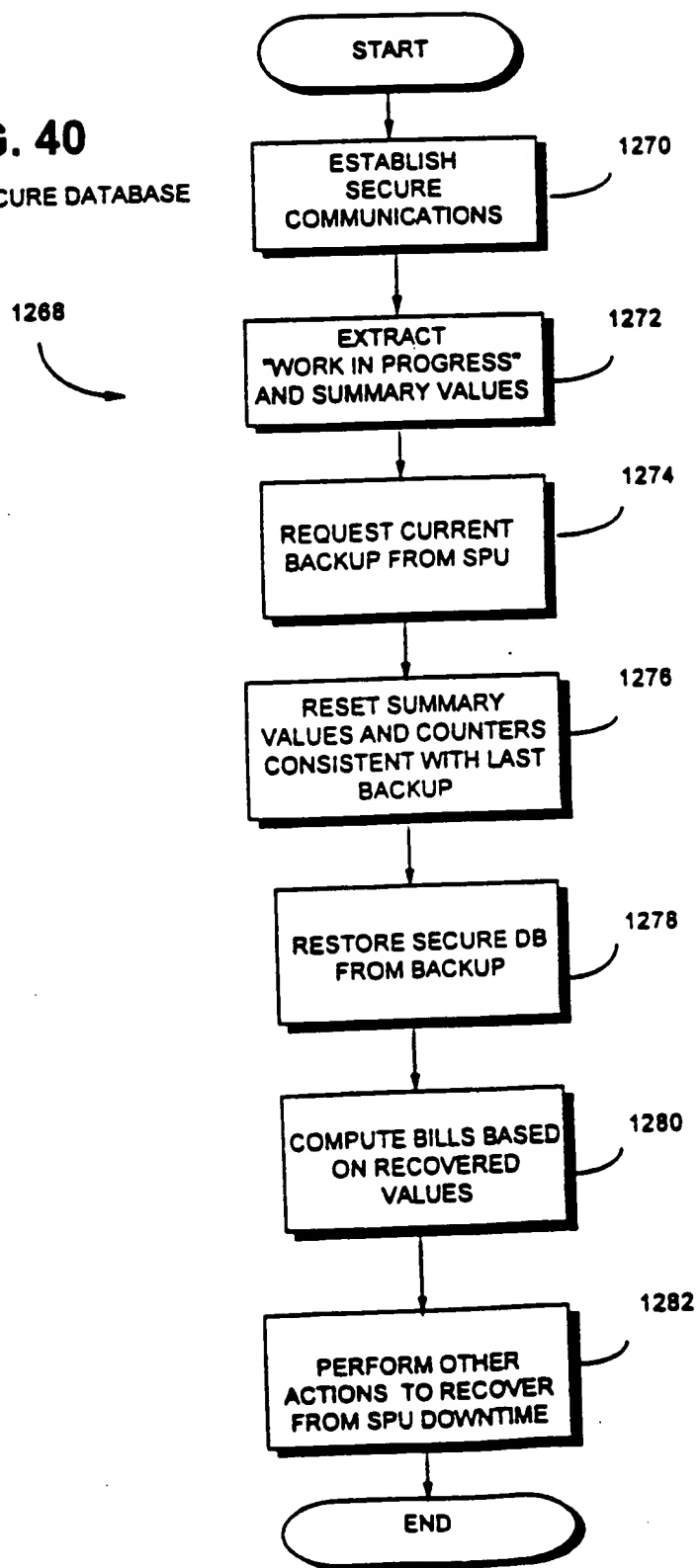


FIG. 40
RECOVER SECURE DATABASE



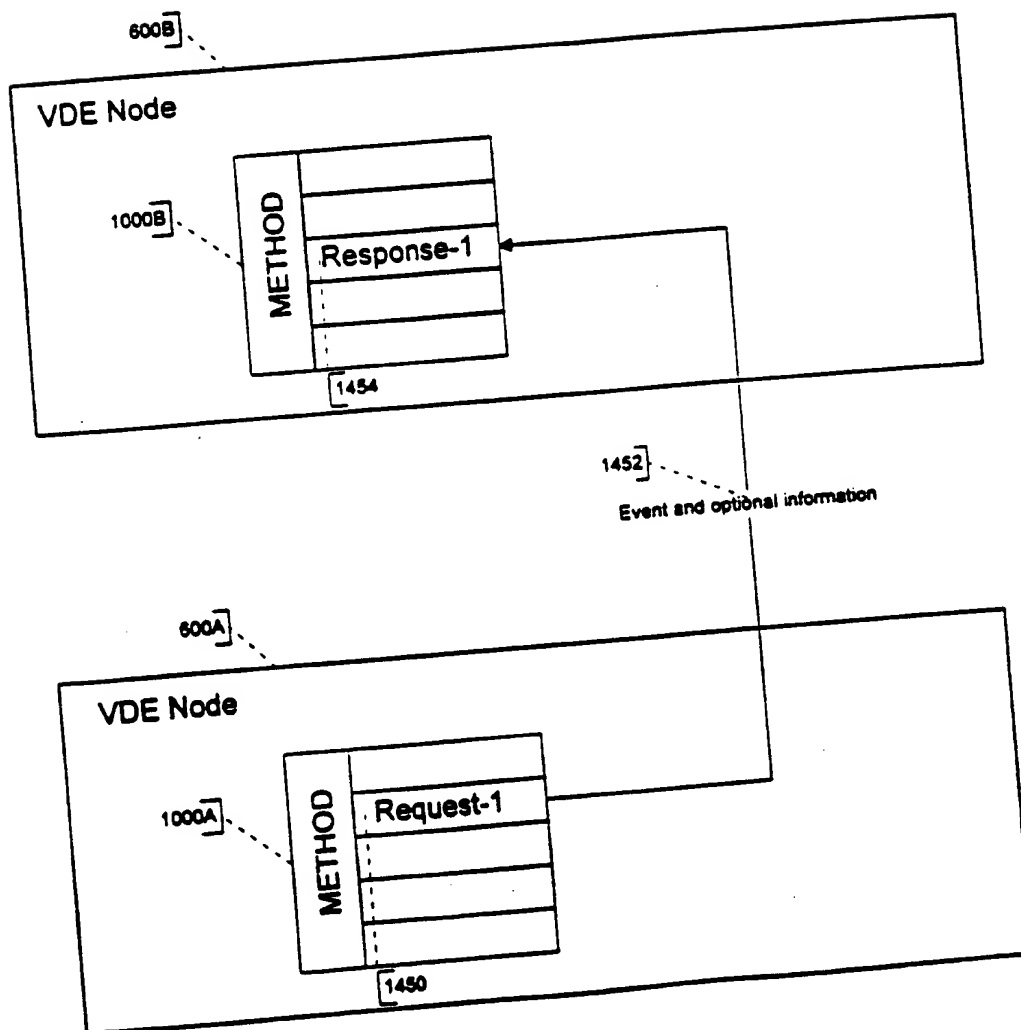


Figure 41a

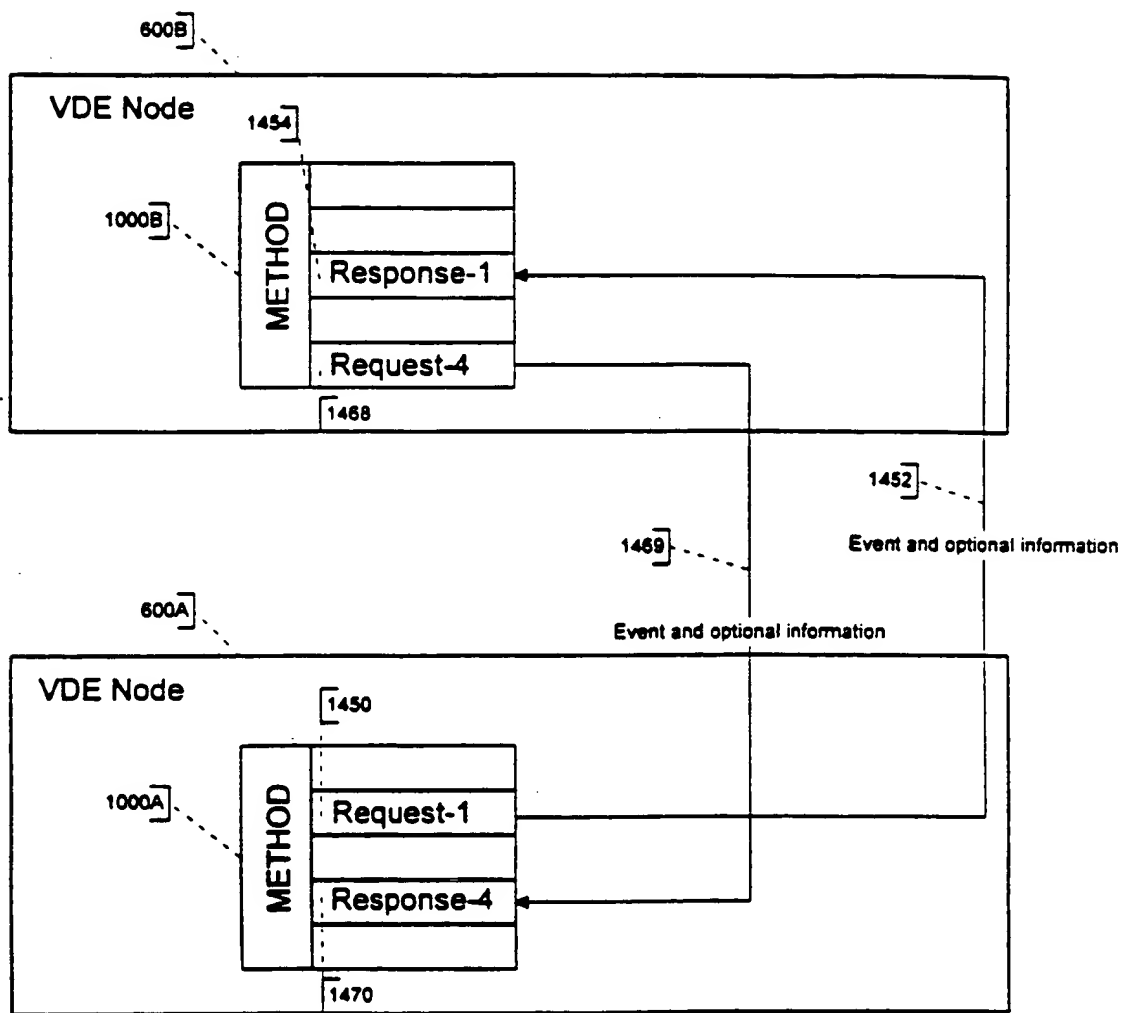


Figure 41b

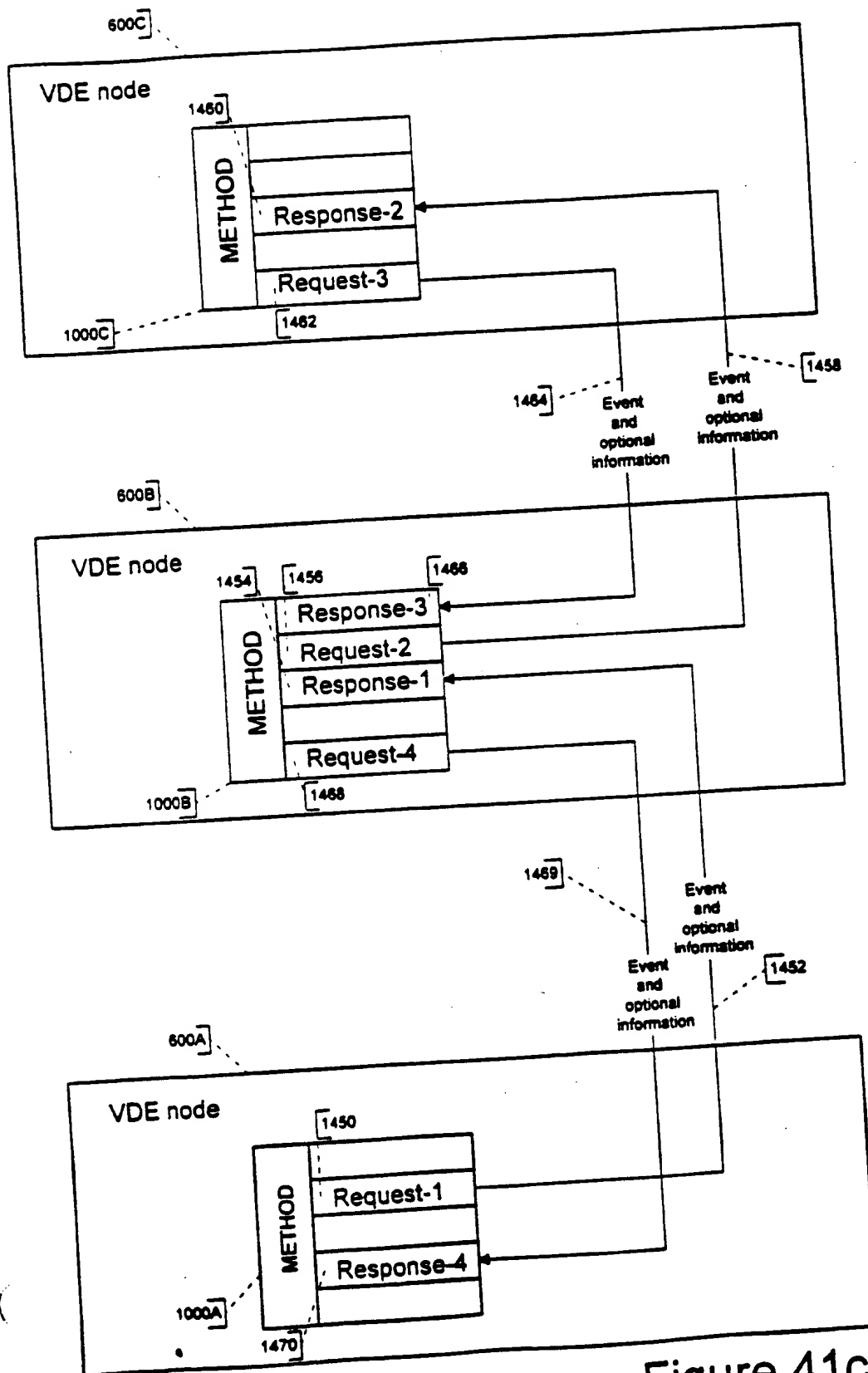


Figure 41c

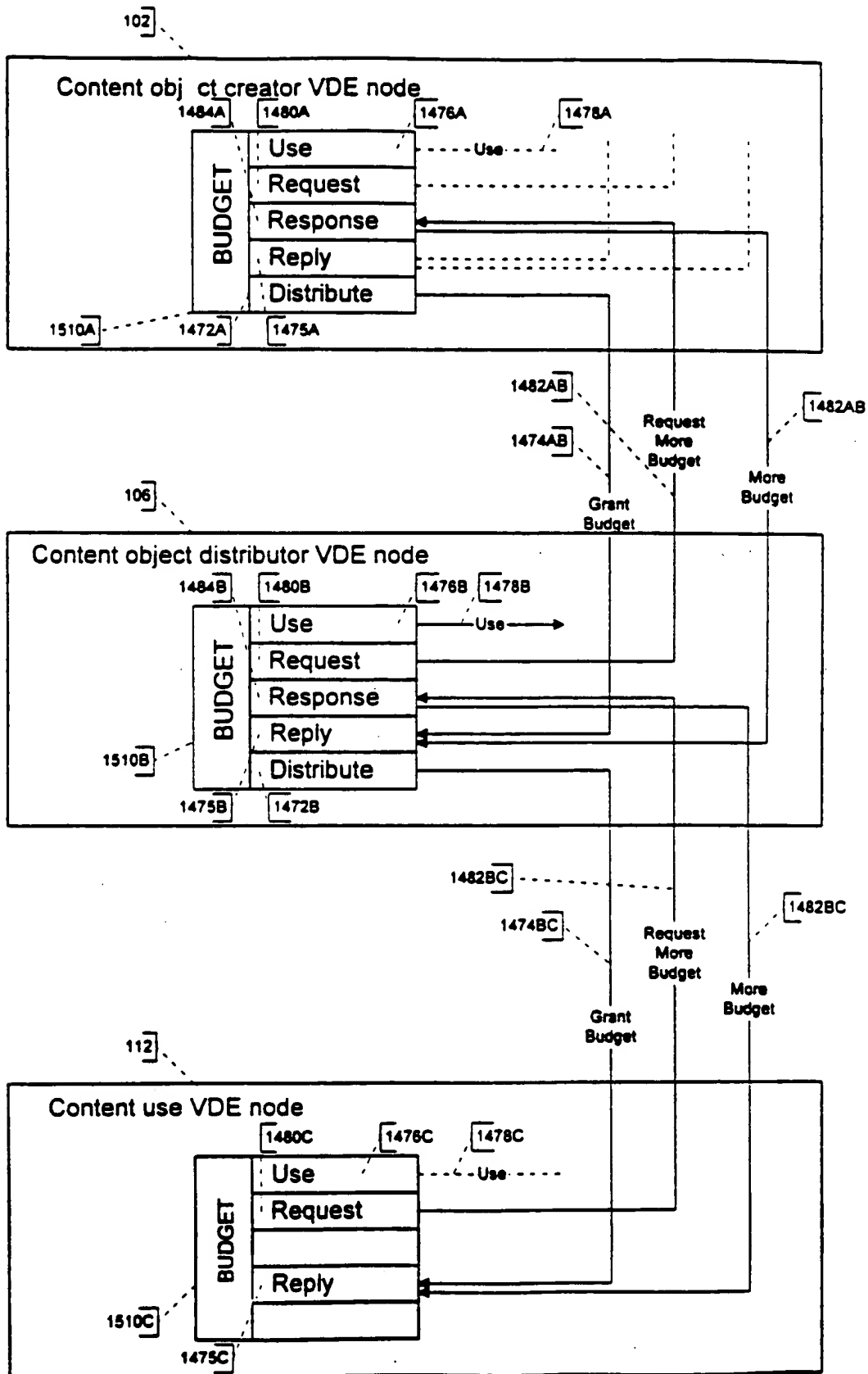


Figure 41d

BUDGET Method Use Process Flow

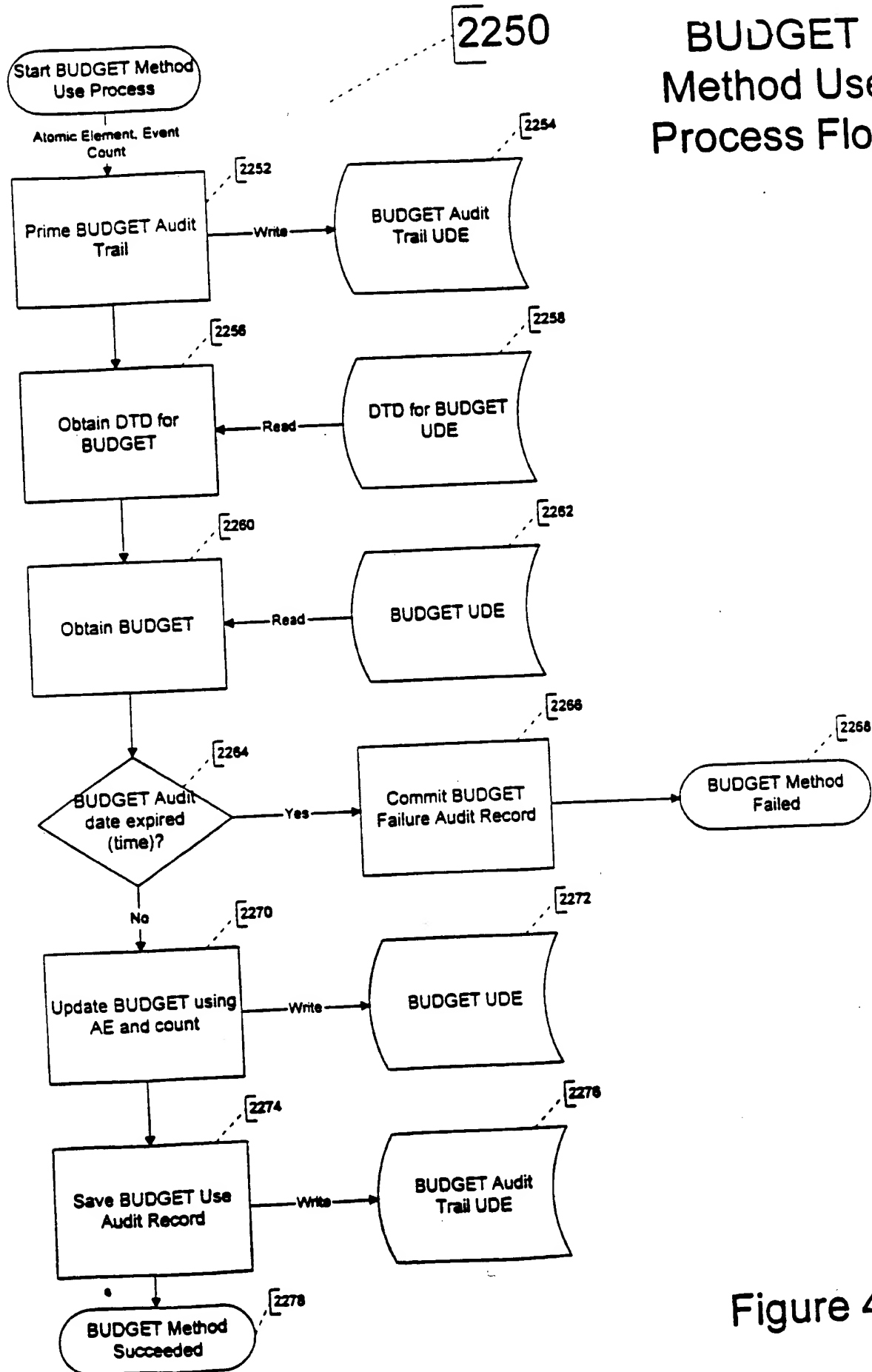


Figure 42a

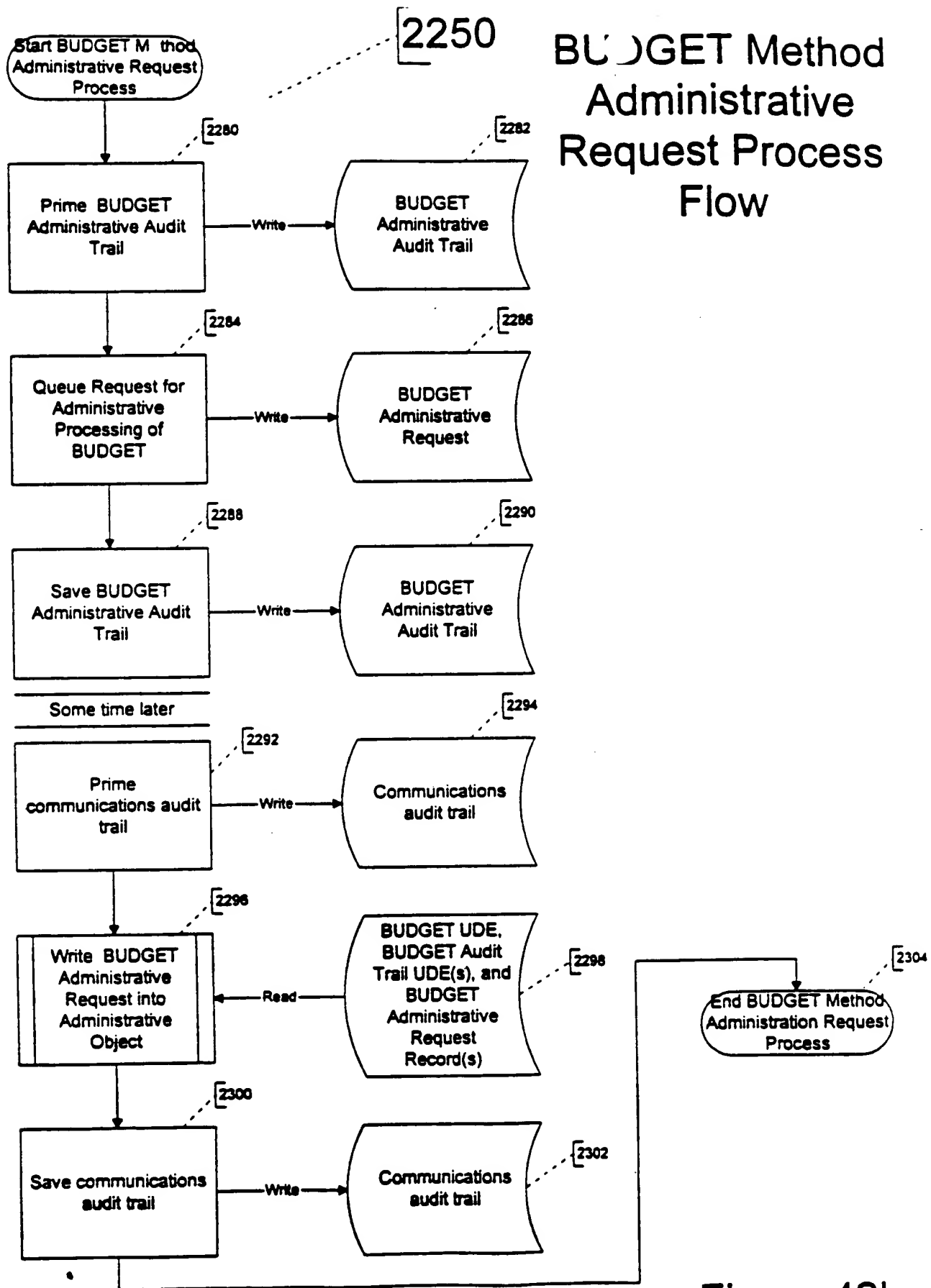


Figure 42b

E JDGET Method Administrative Response Process Flow

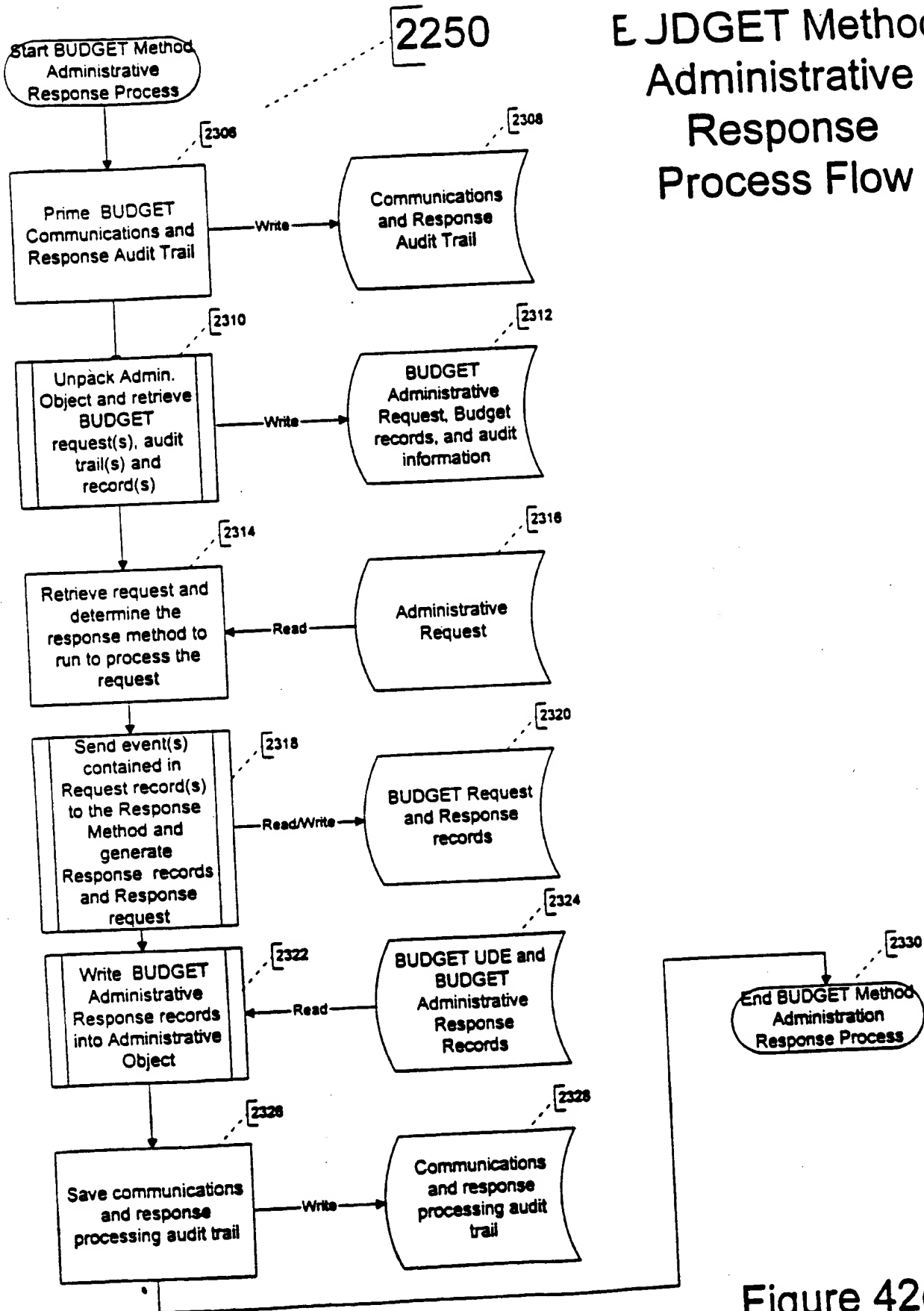
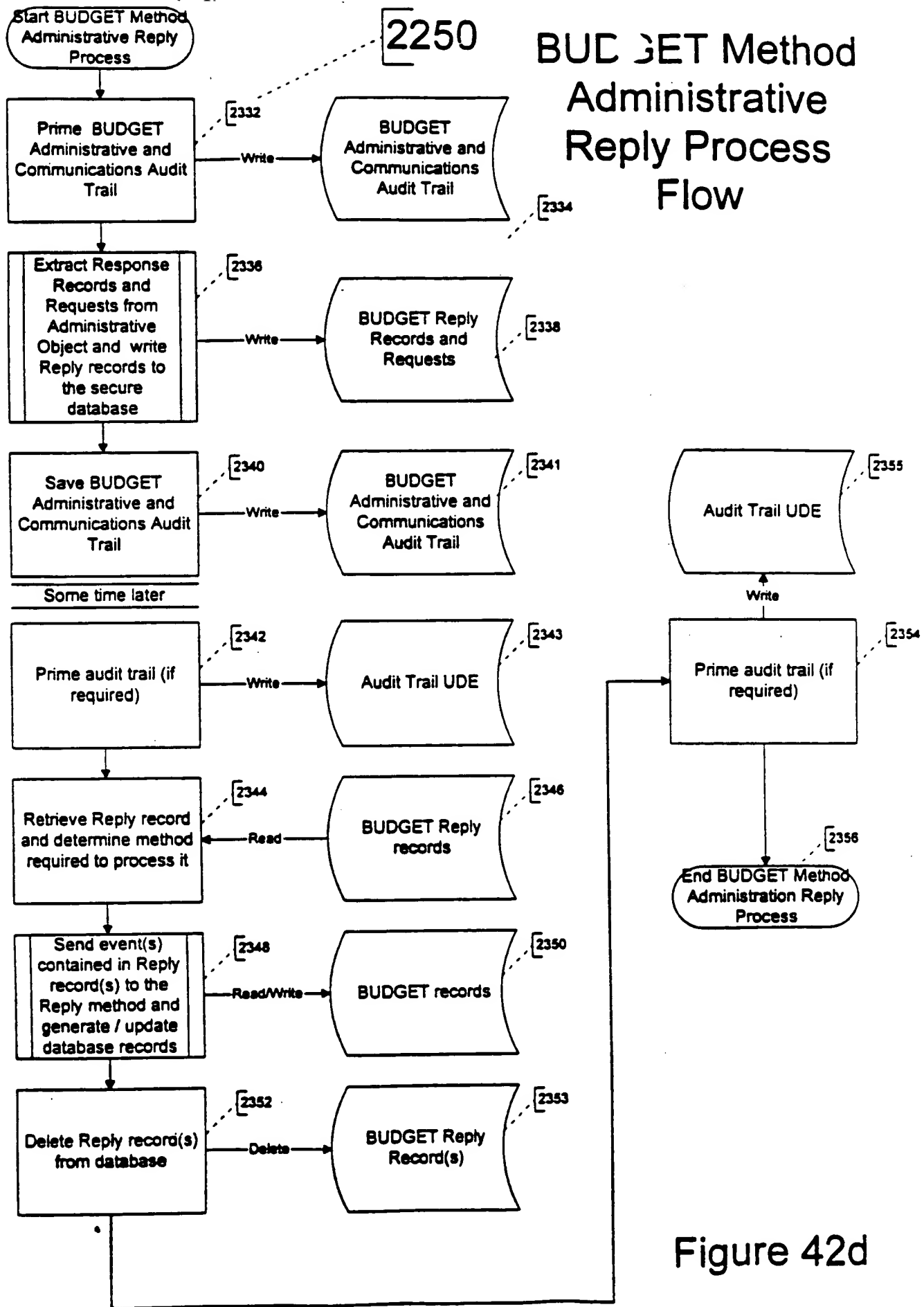


Figure 42c



REGISTER Method Use Process Flow

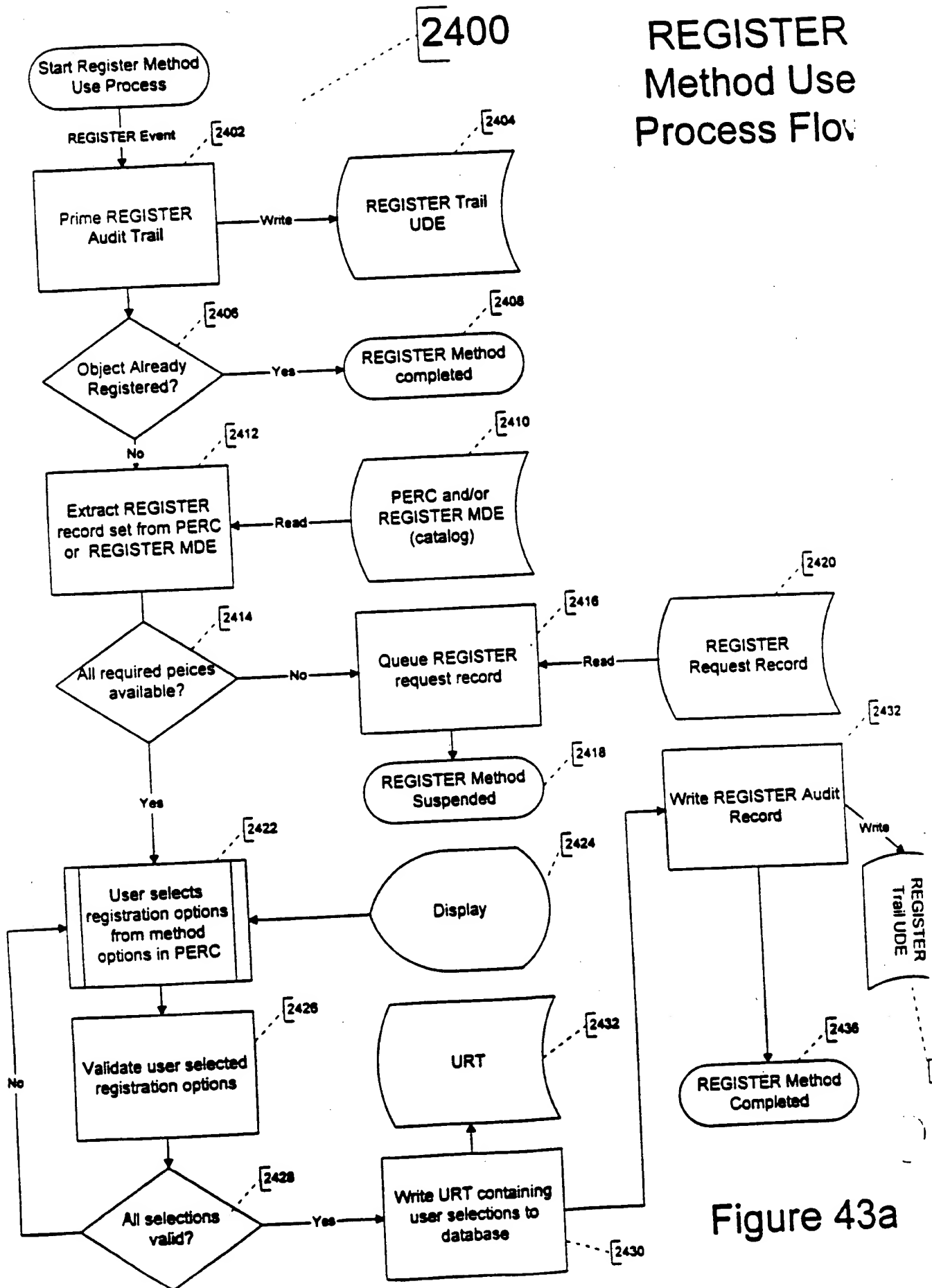


Figure 43a

REGISTER Method Administrative Request Process Flow

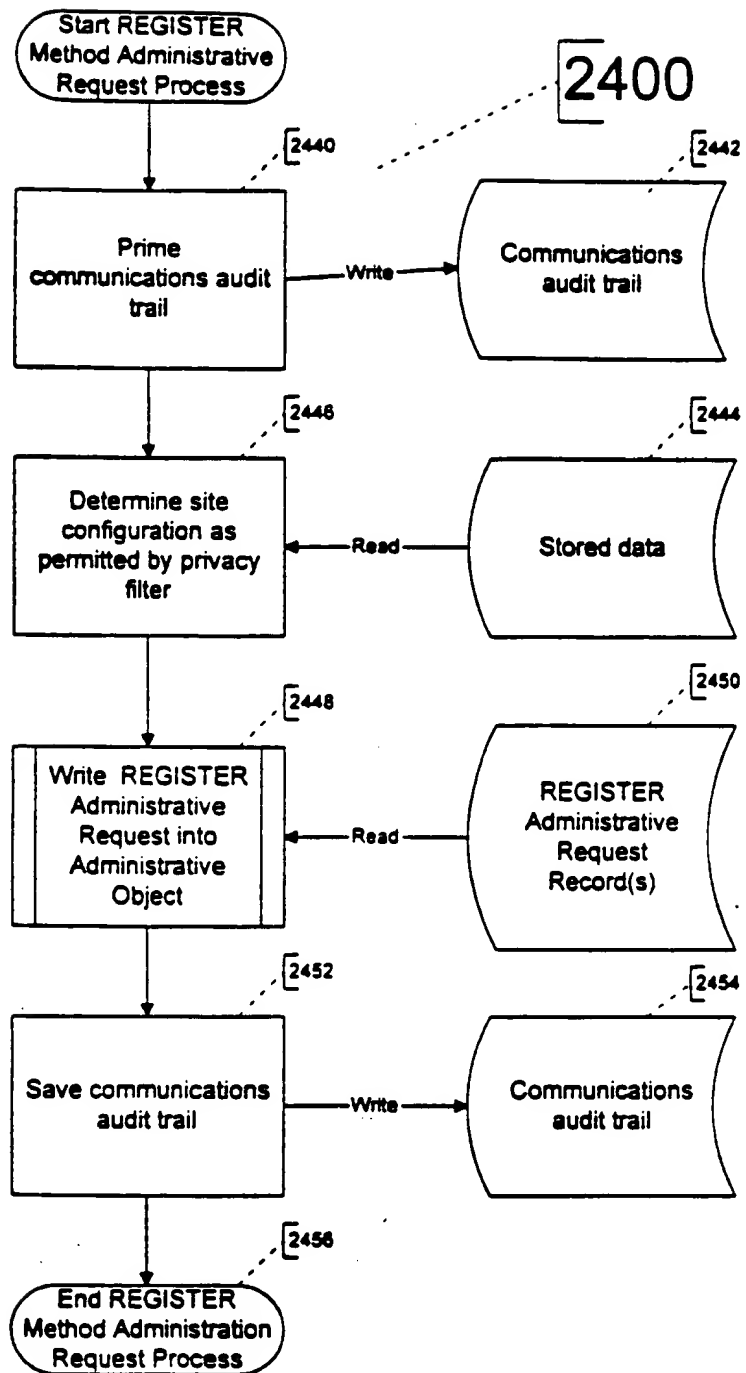


Figure 43b

REGISTER Method Administrative Response Process Flow

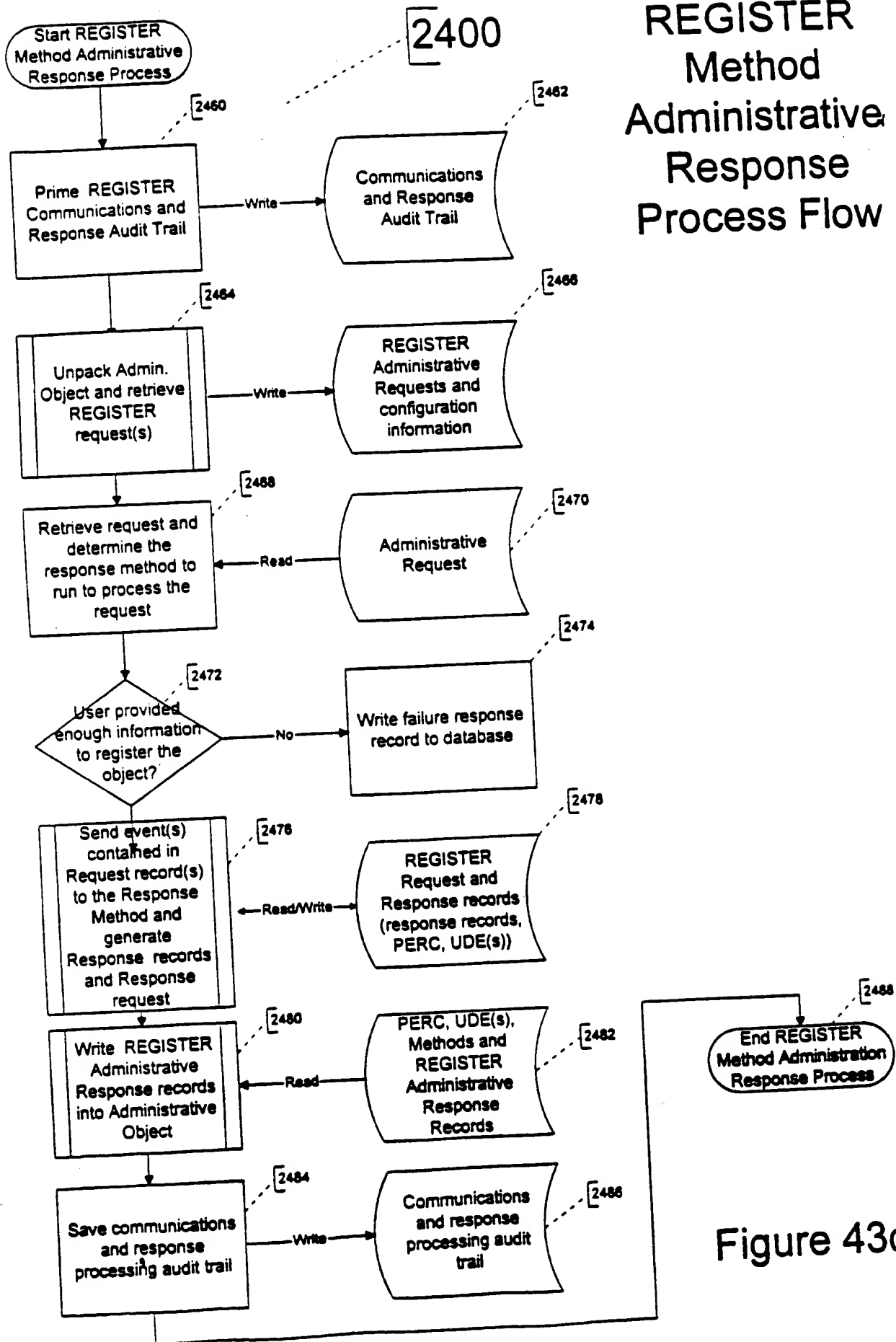


Figure 43c

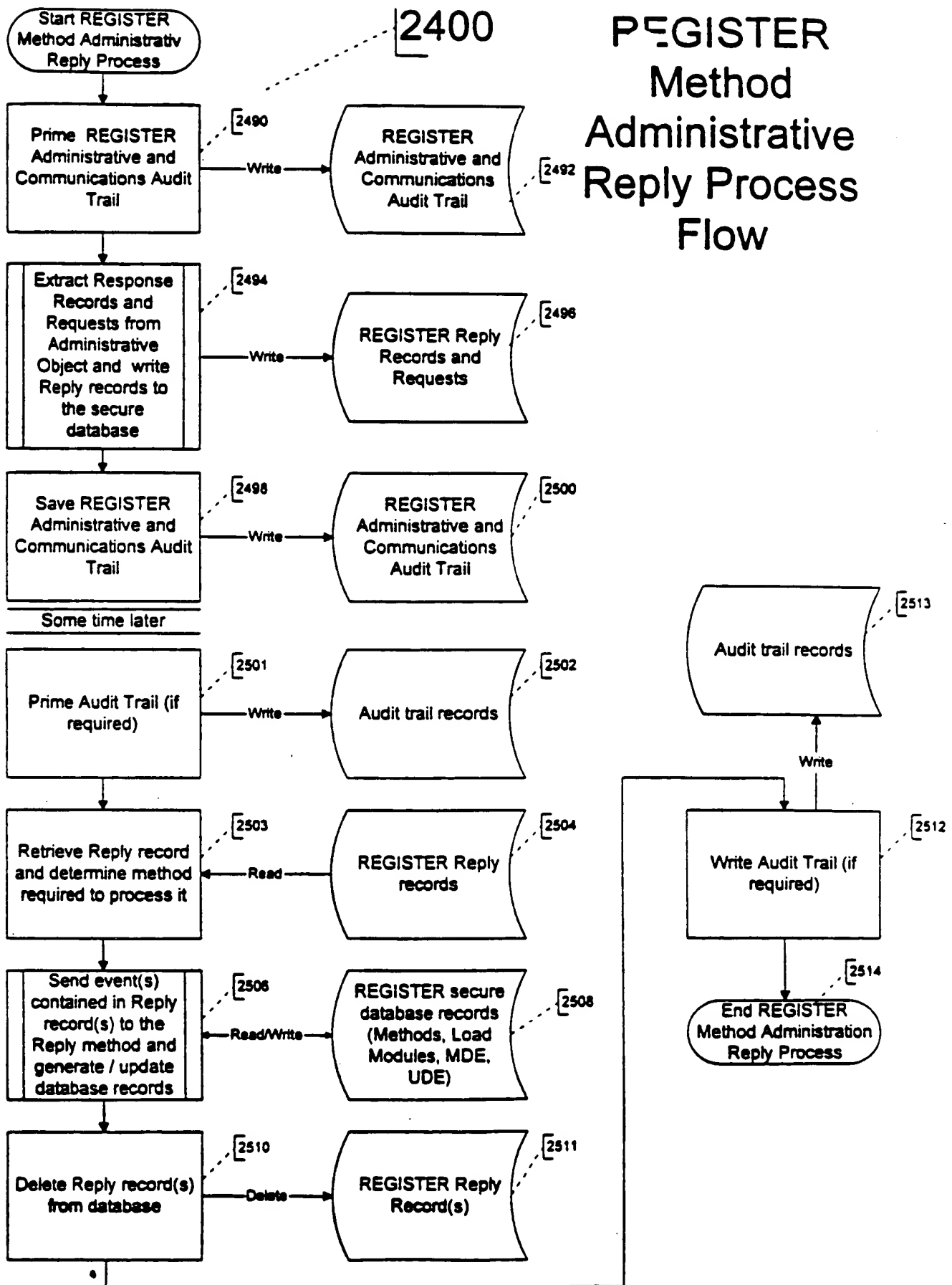


Figure 43d

AJDIT Method Administrative Request Process Flow

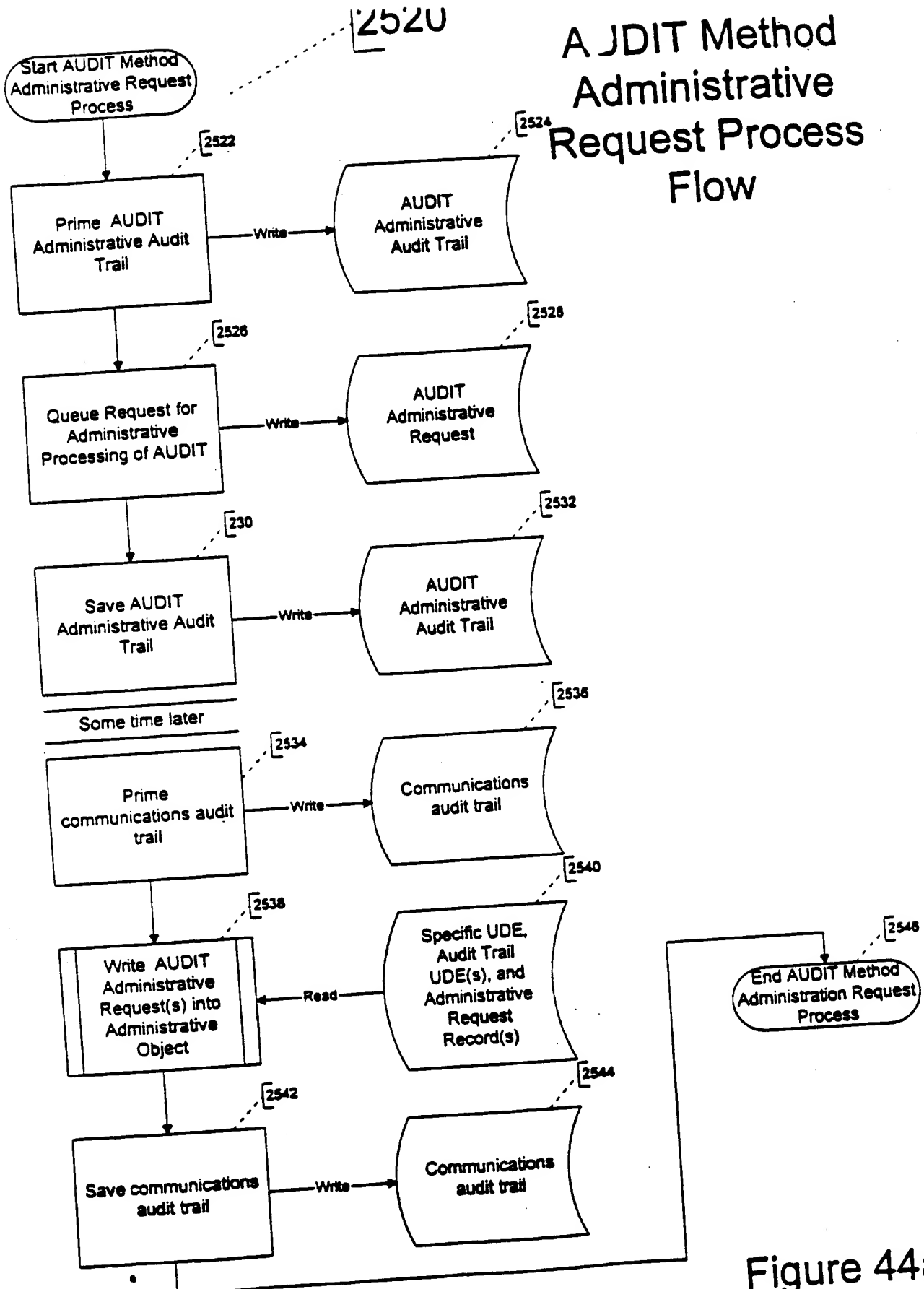


Figure 44a

AUDIT Method Administrative Response Process Flow

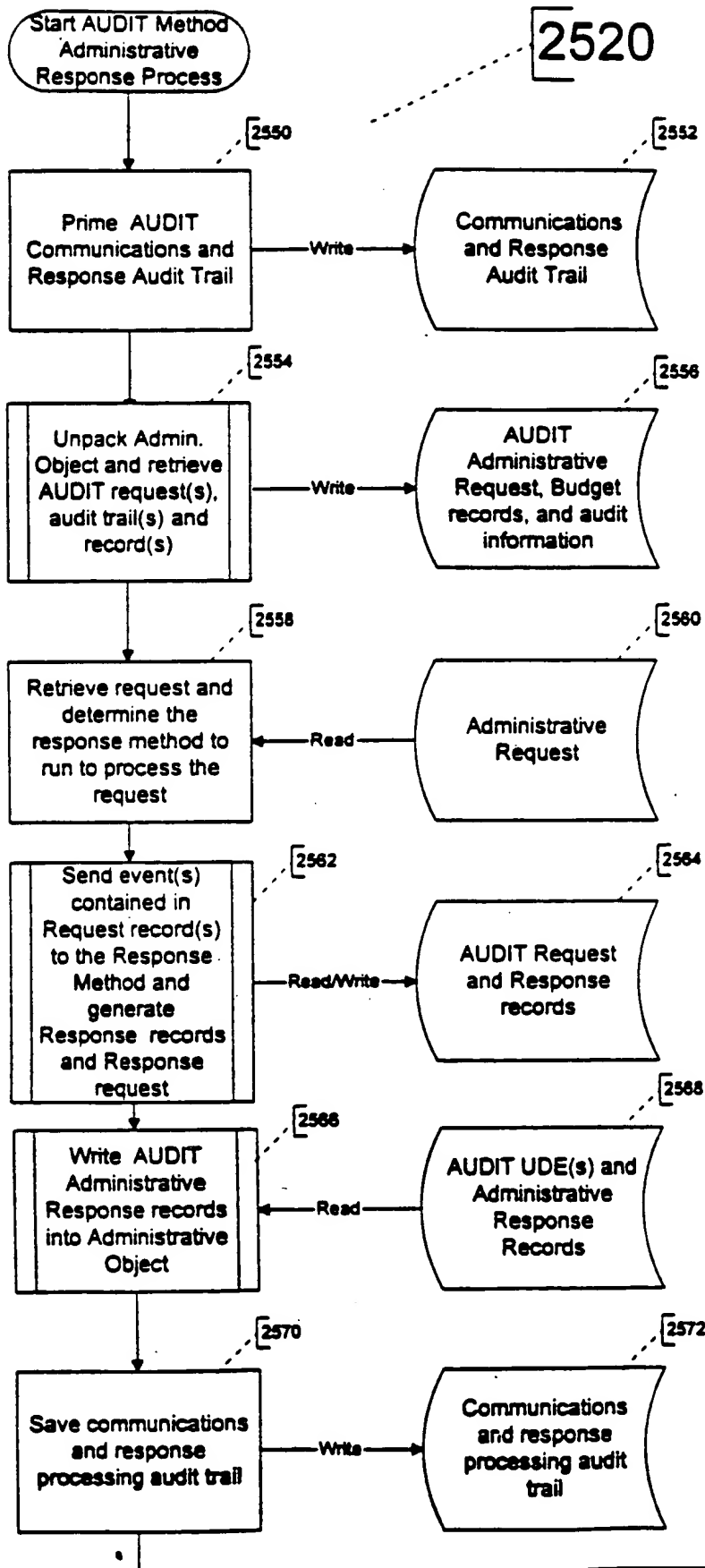


Figure 44b

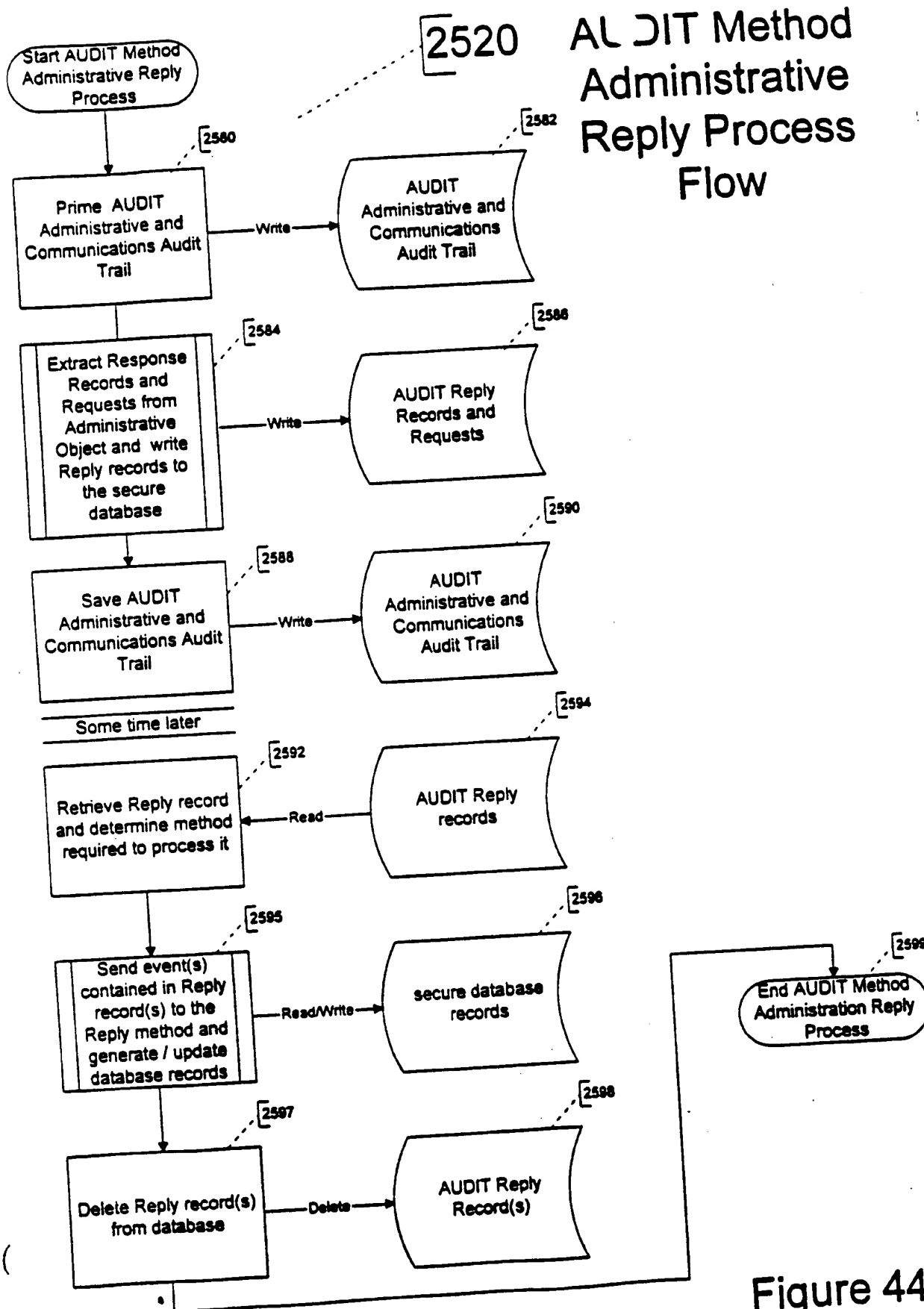


Figure 44c

FIG. 45

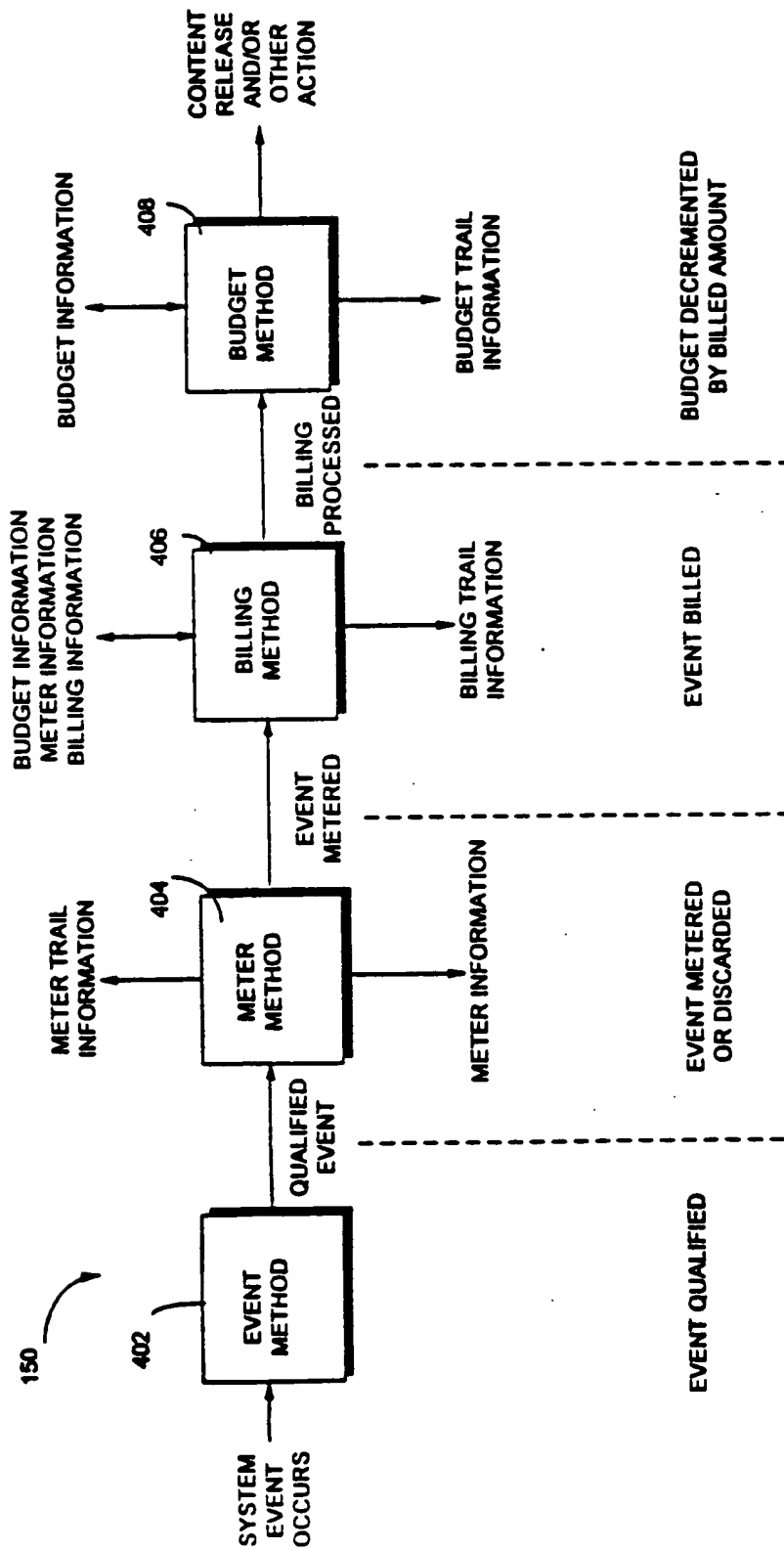


FIG. 46

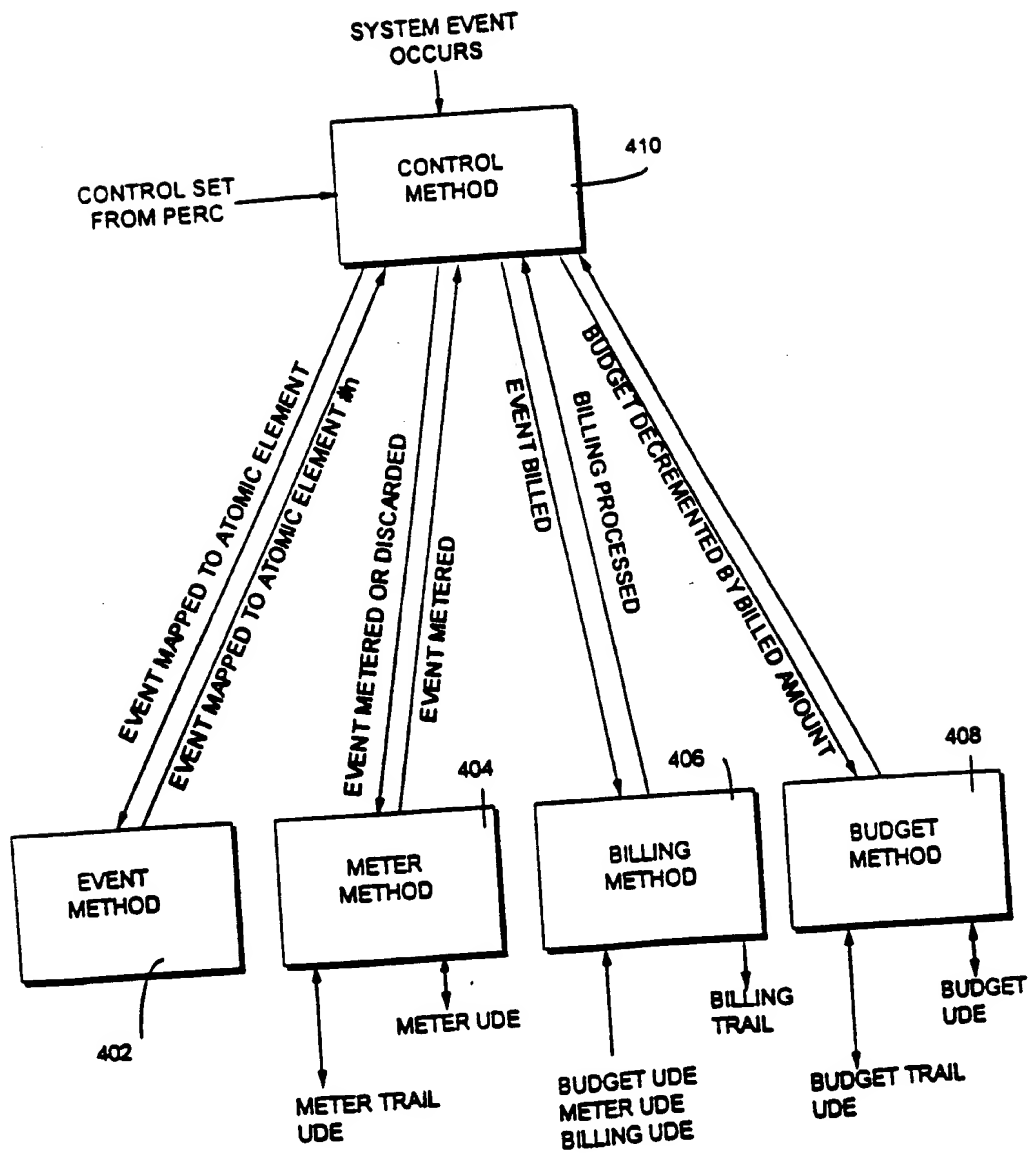
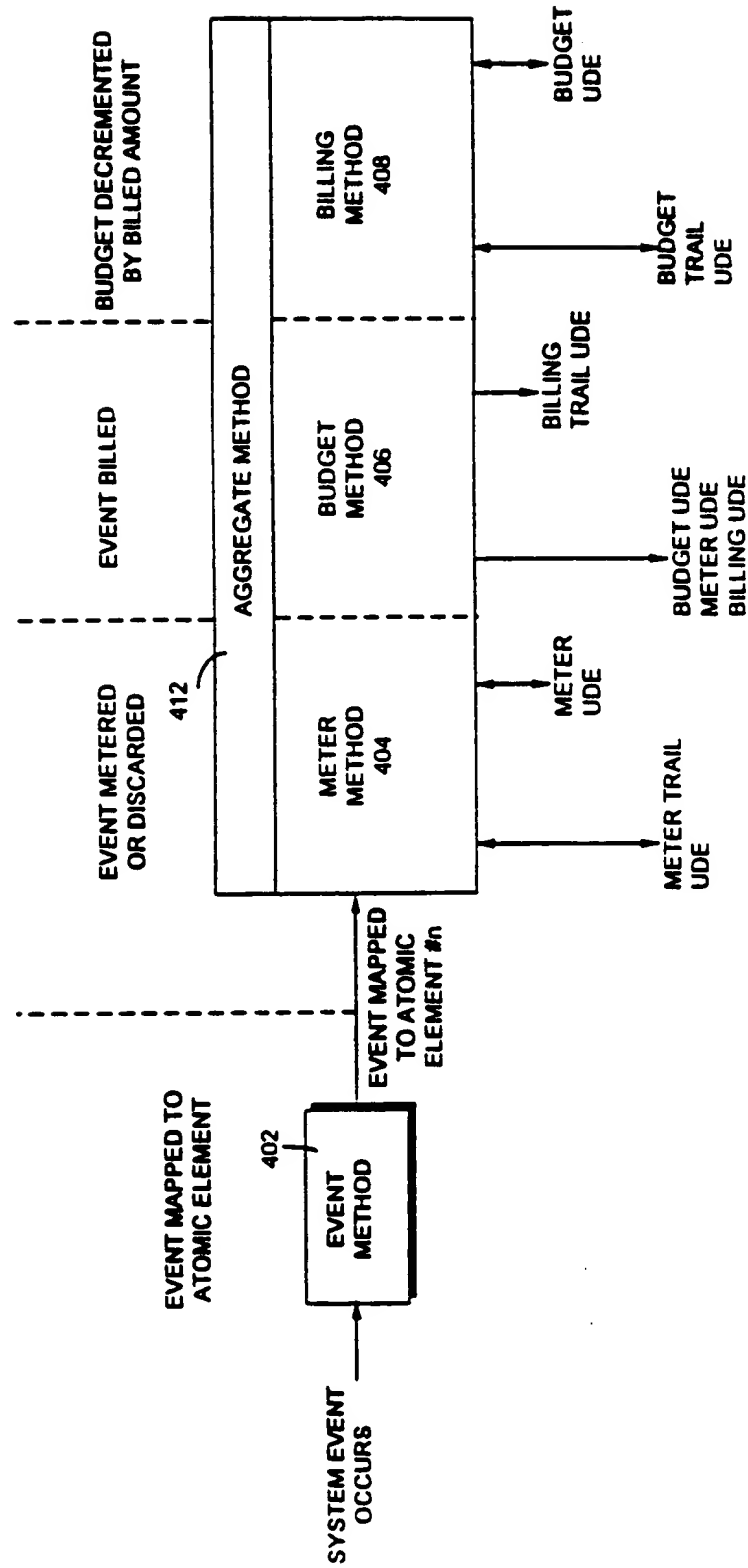


FIG. 47



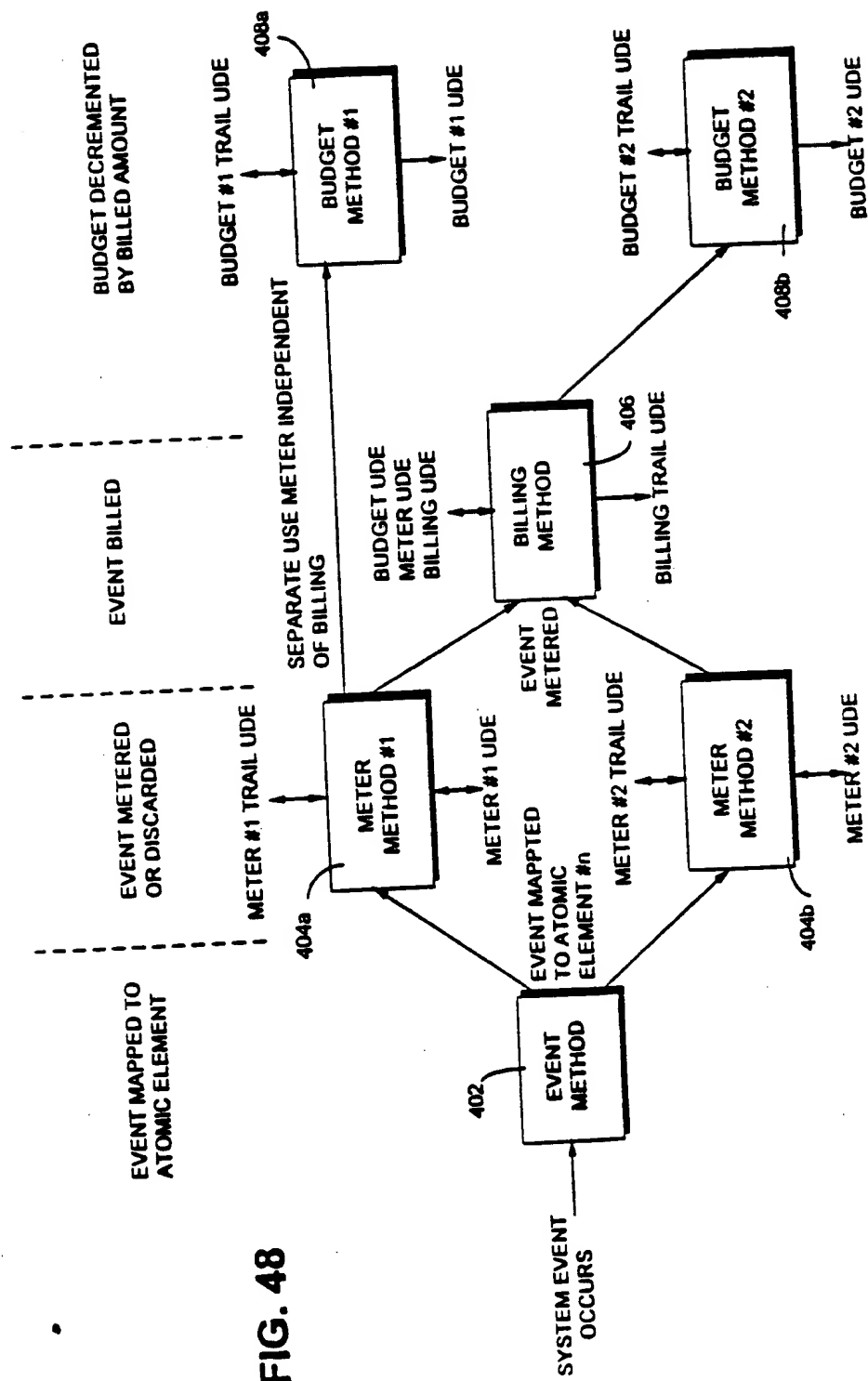


FIG. 48

OPEN Method Use Process Flow

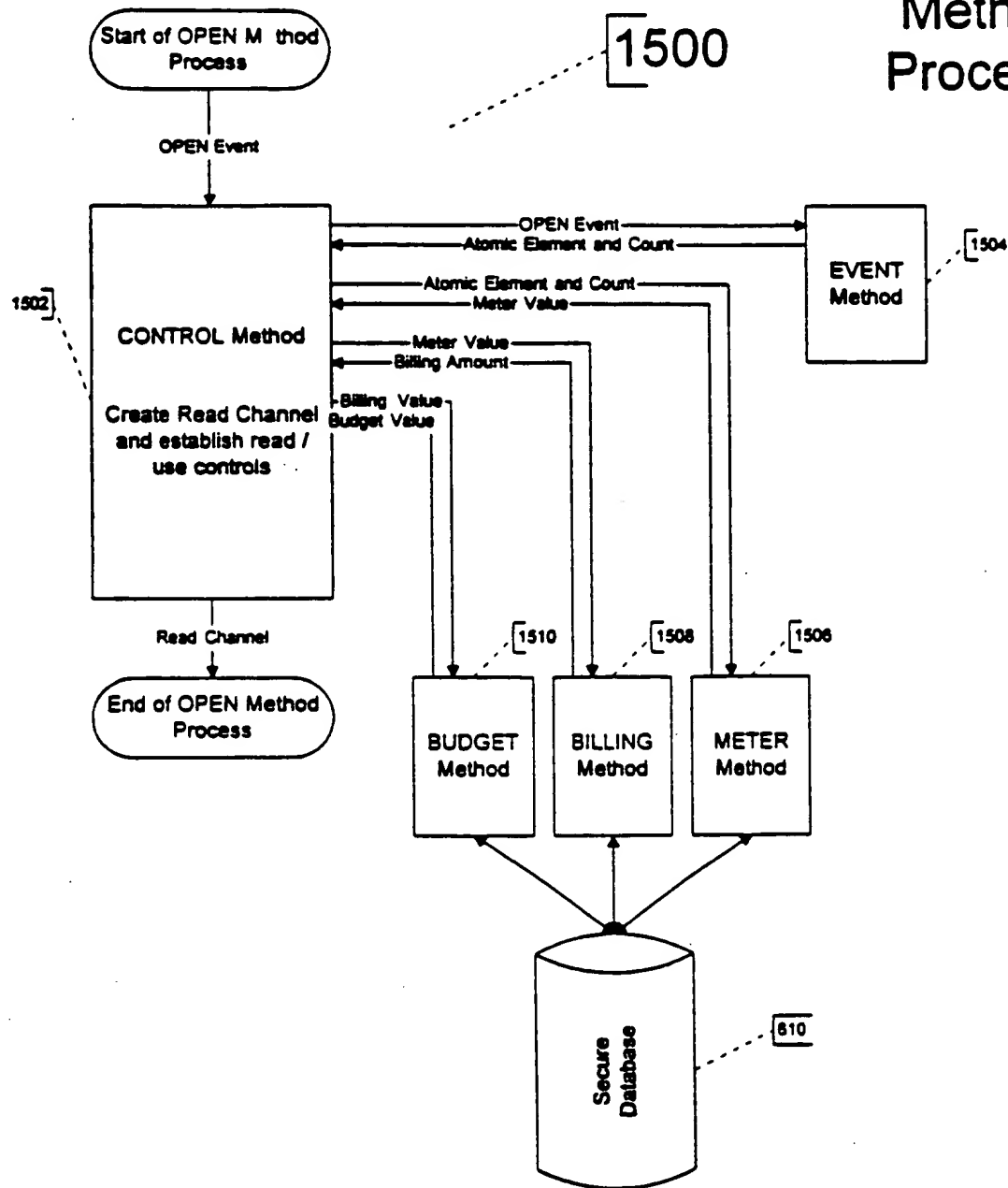


Figure 49

1500

1502

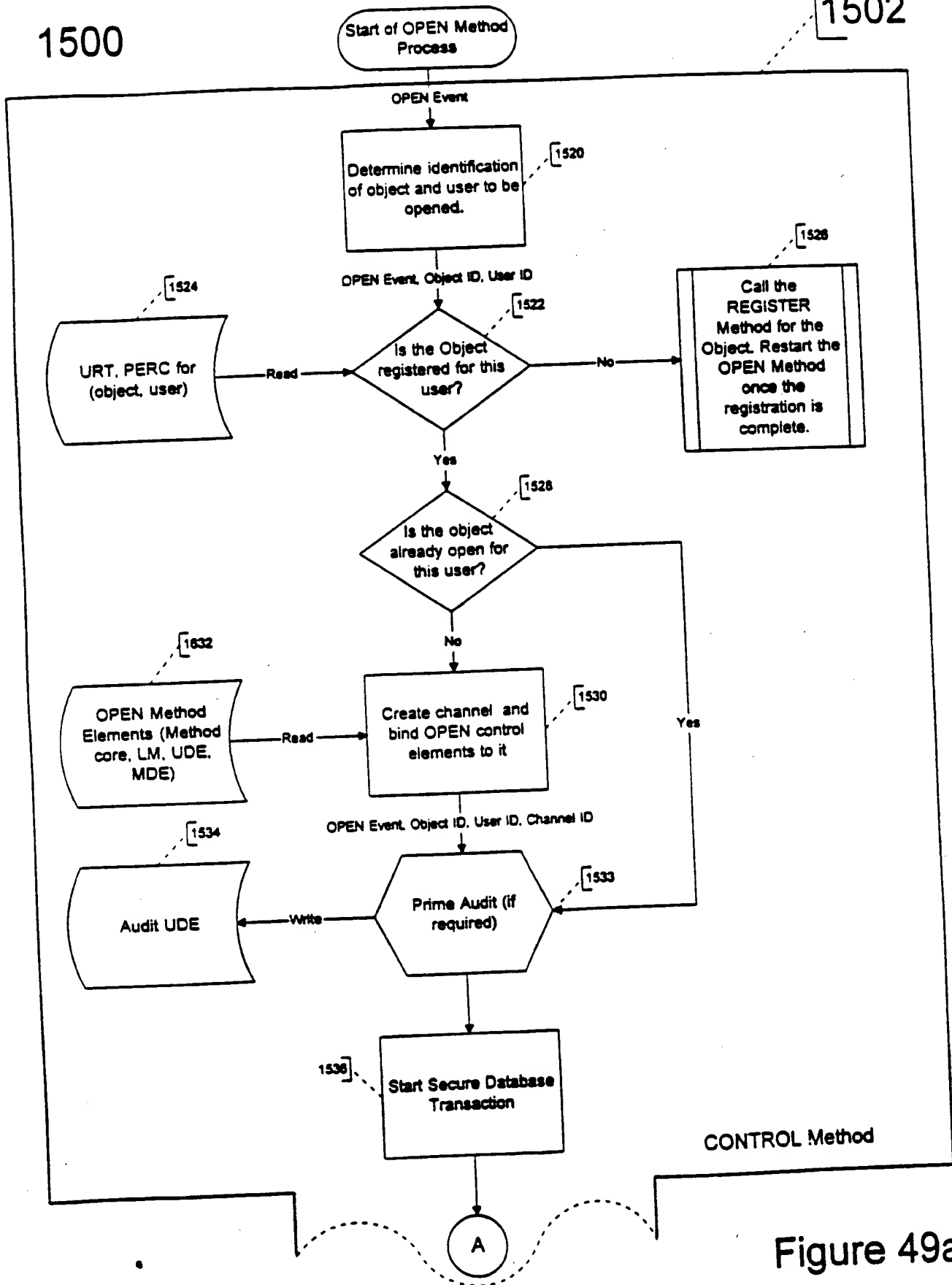


Figure 49a

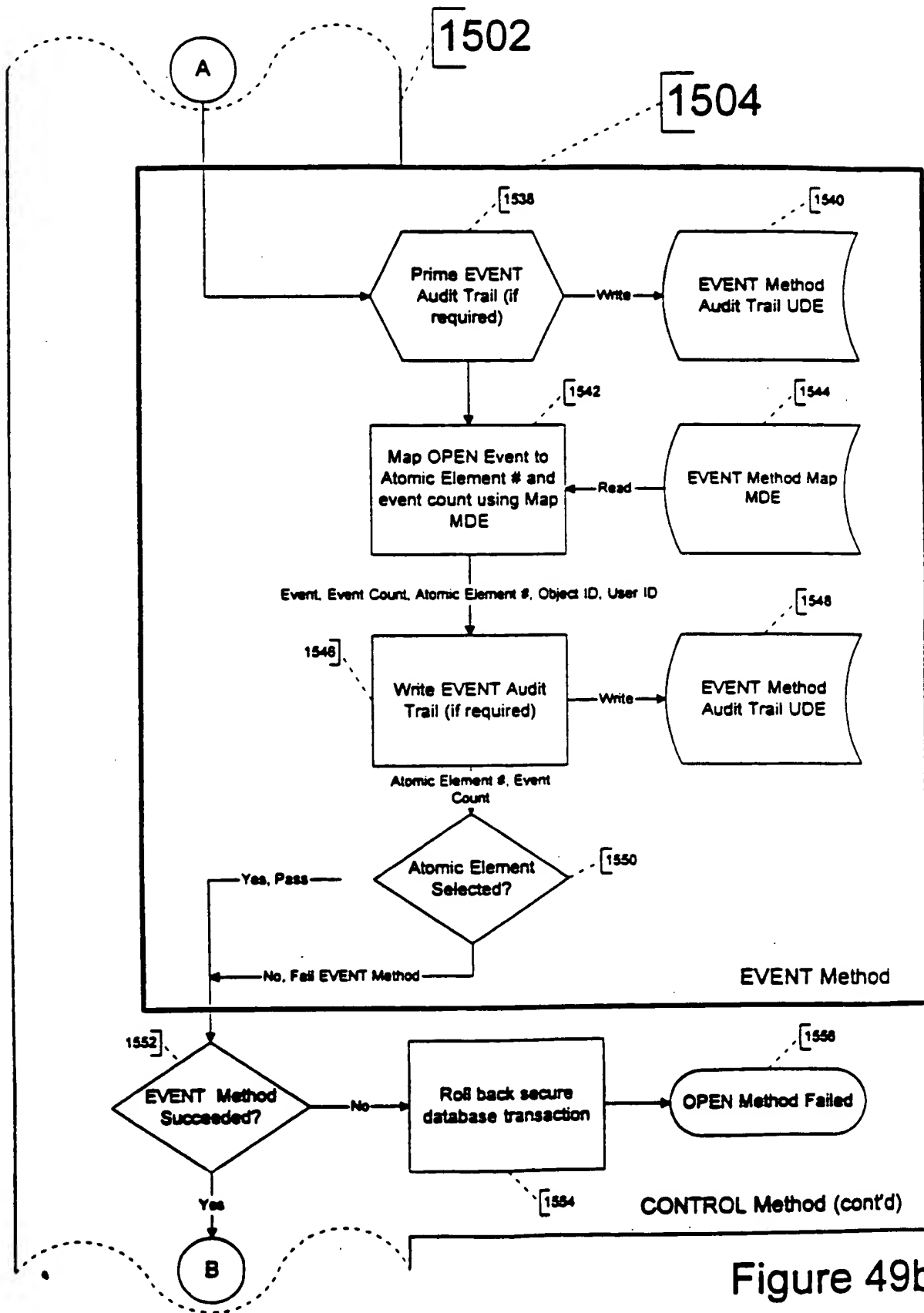
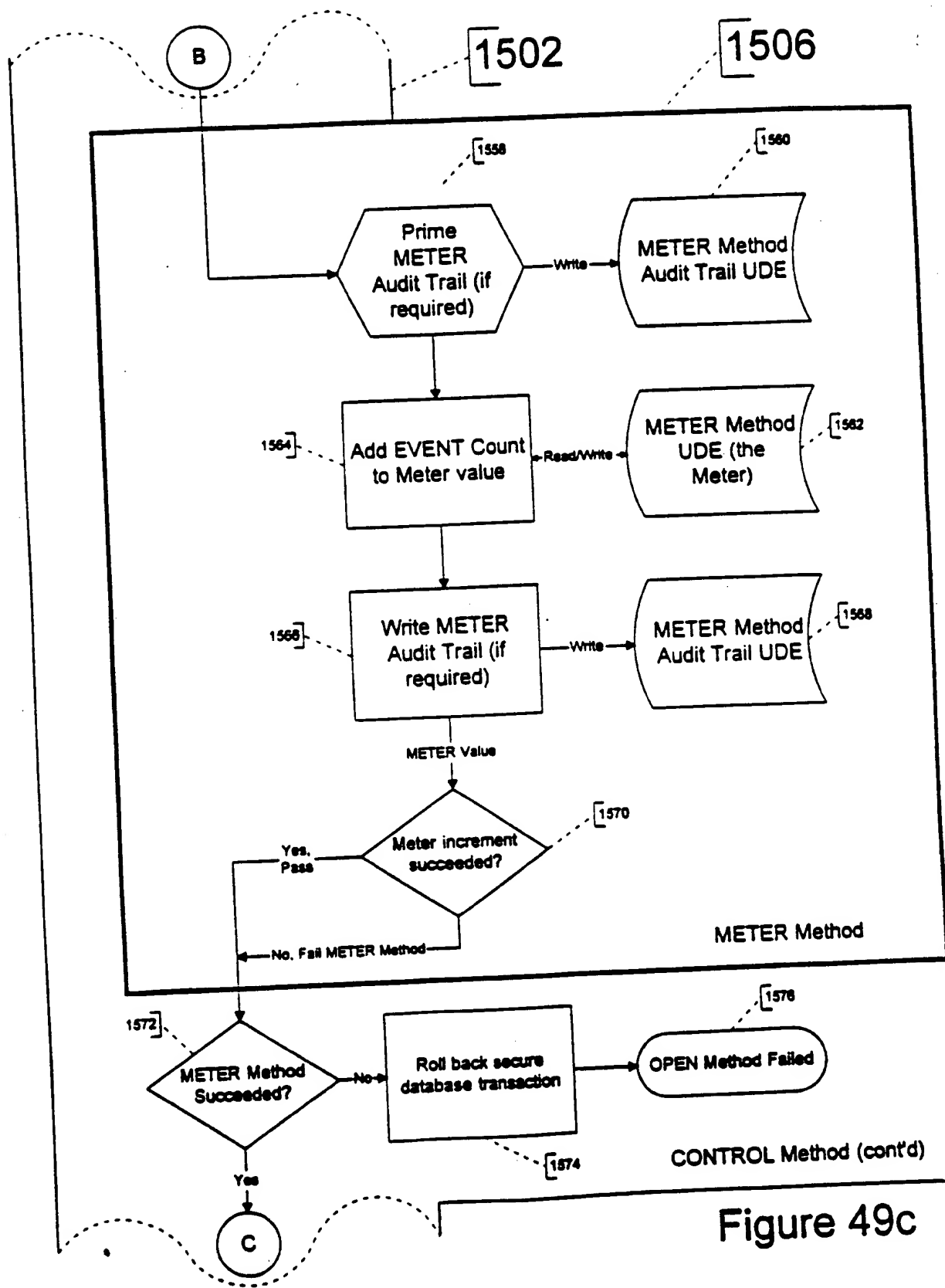


Figure 49b



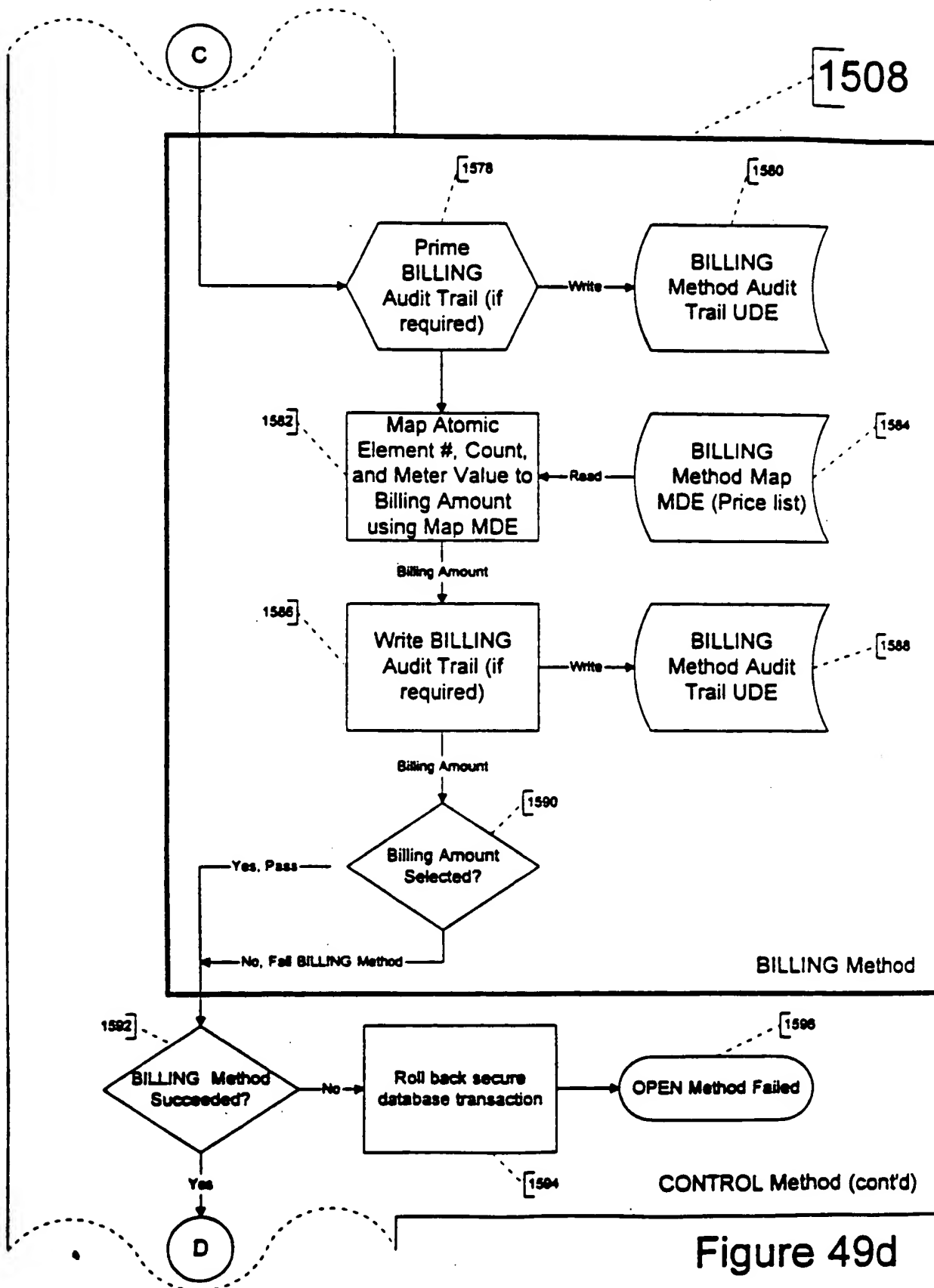


Figure 49d

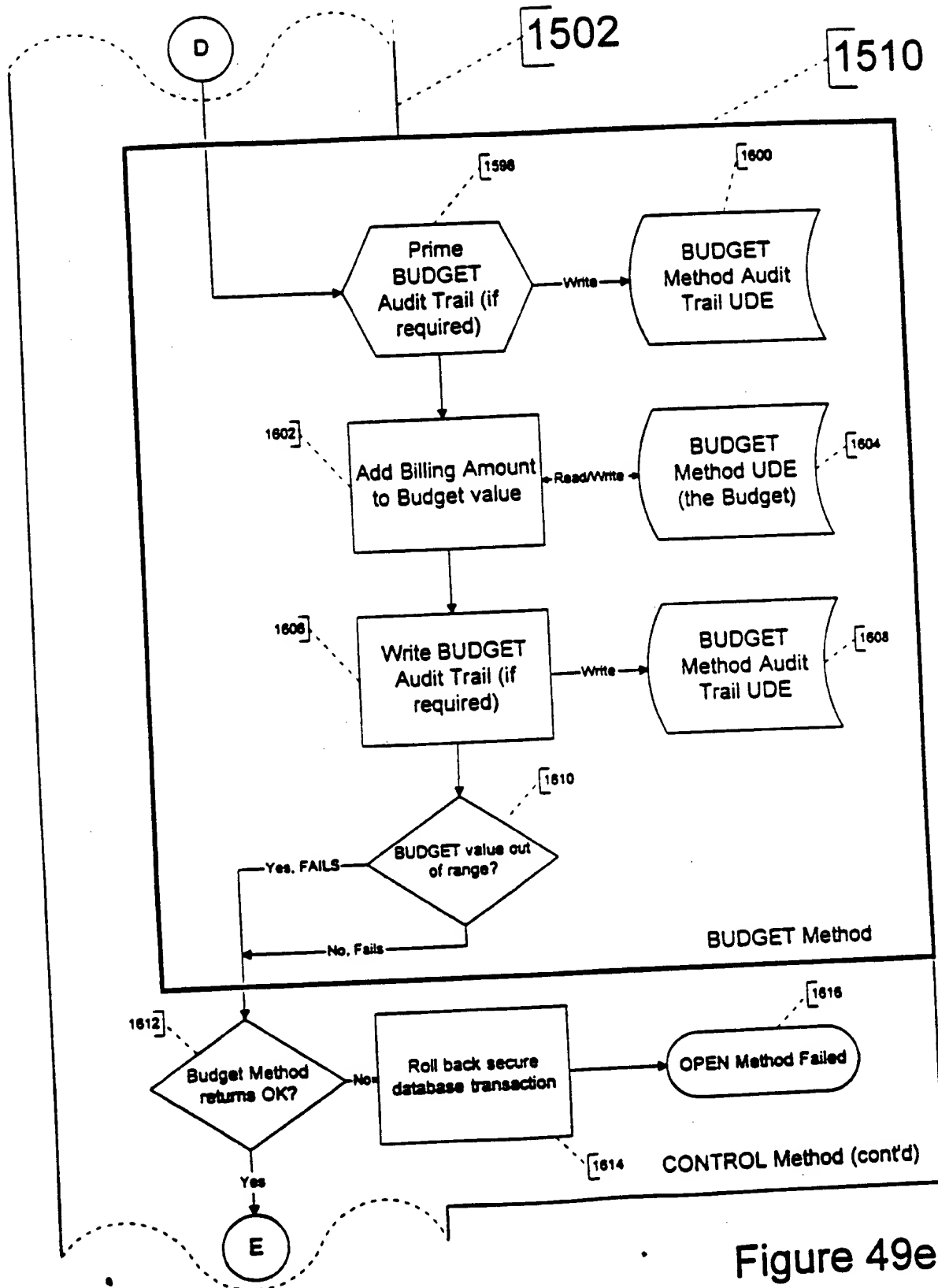


Figure 49e

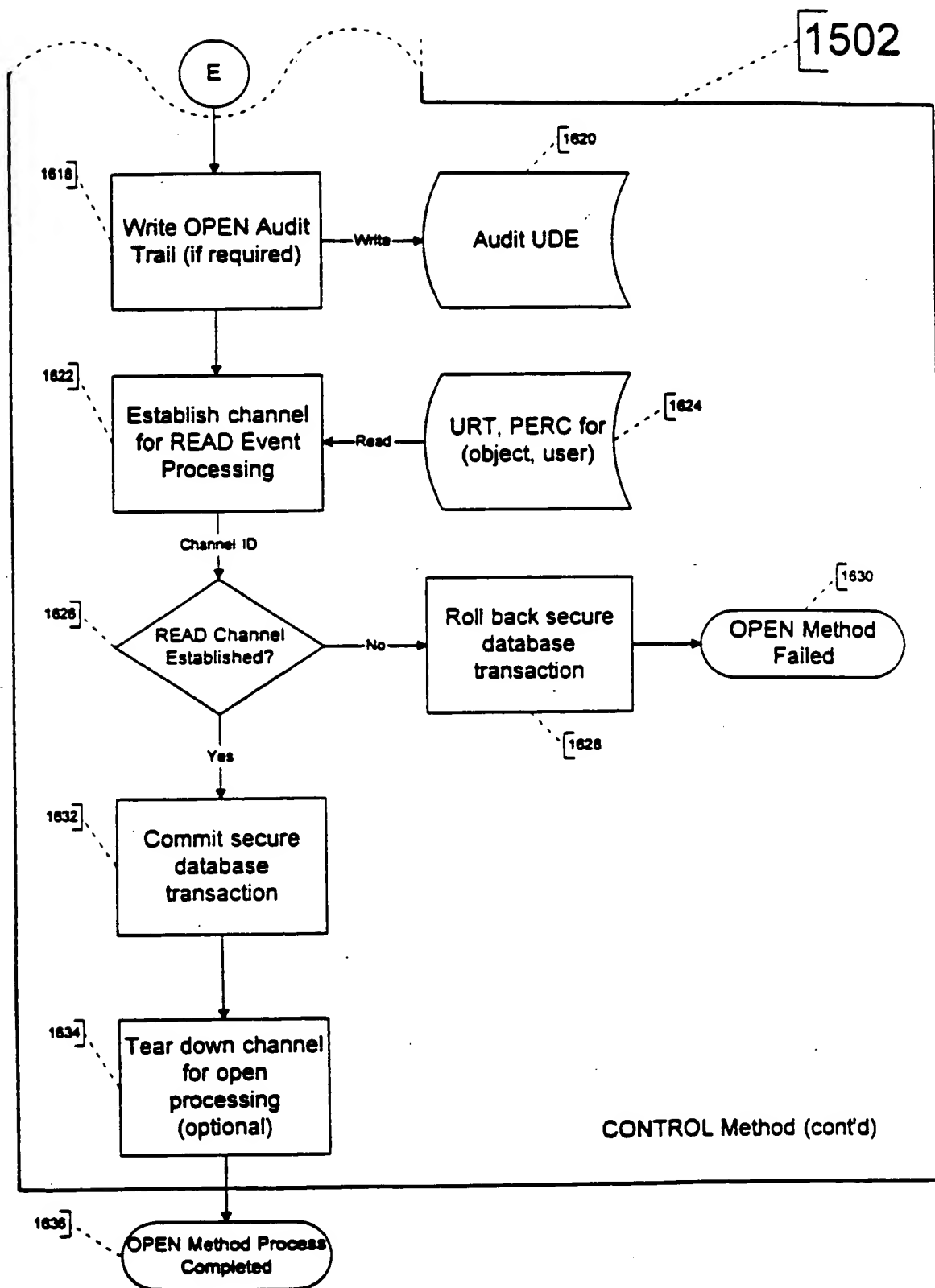


Figure 49f

READ Method Use Process Flow

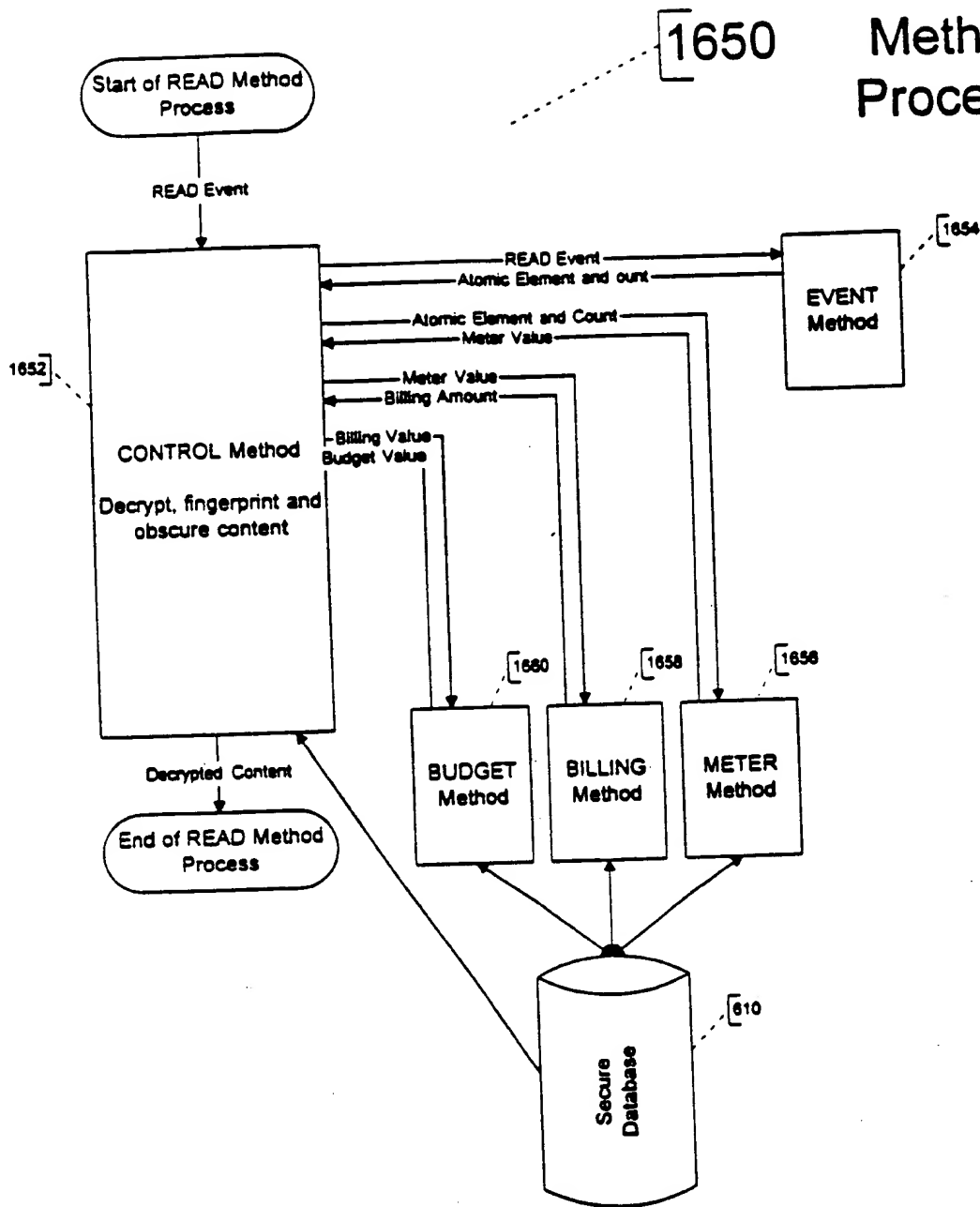


Figure 50

1650

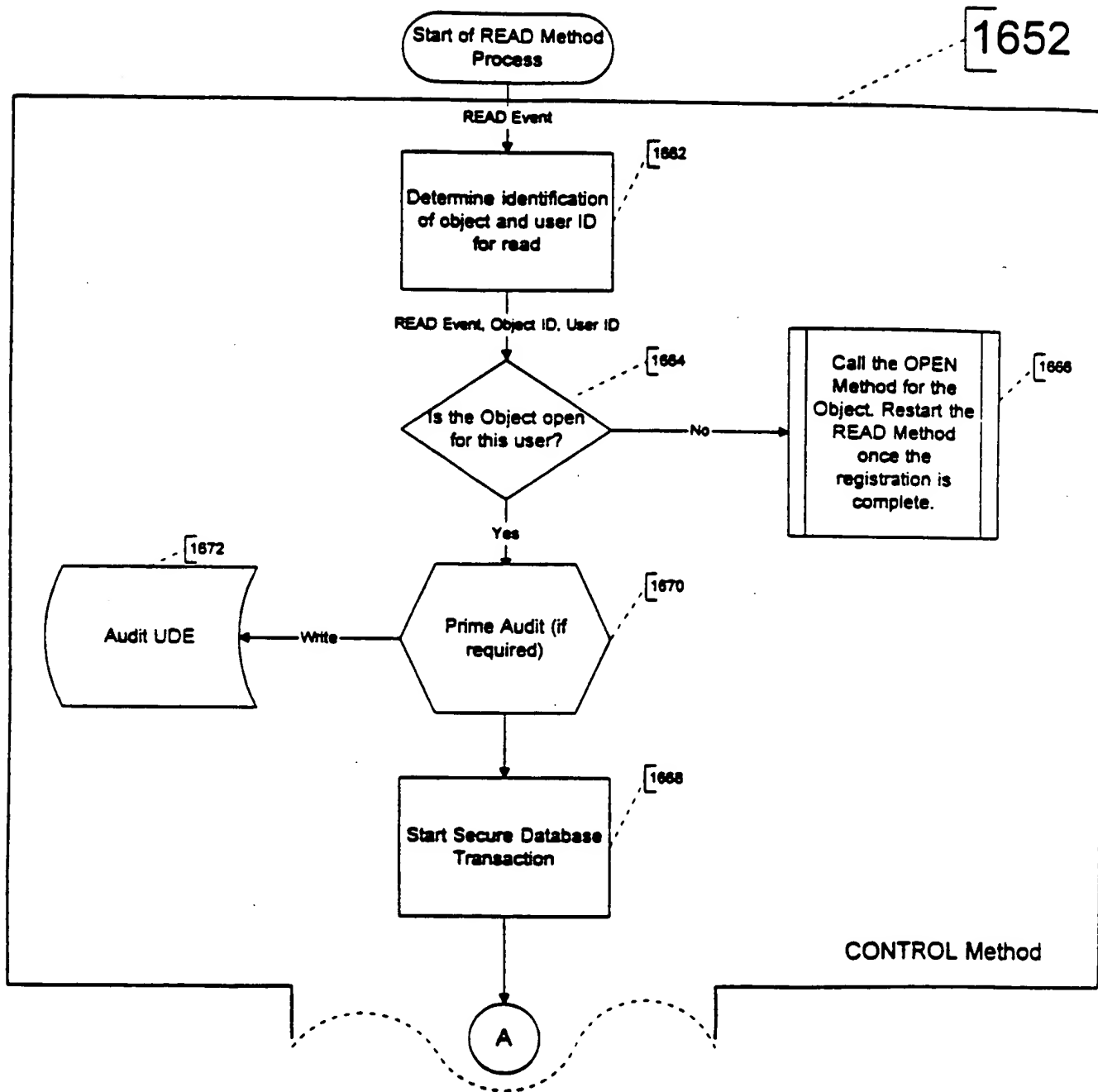


Figure 50a

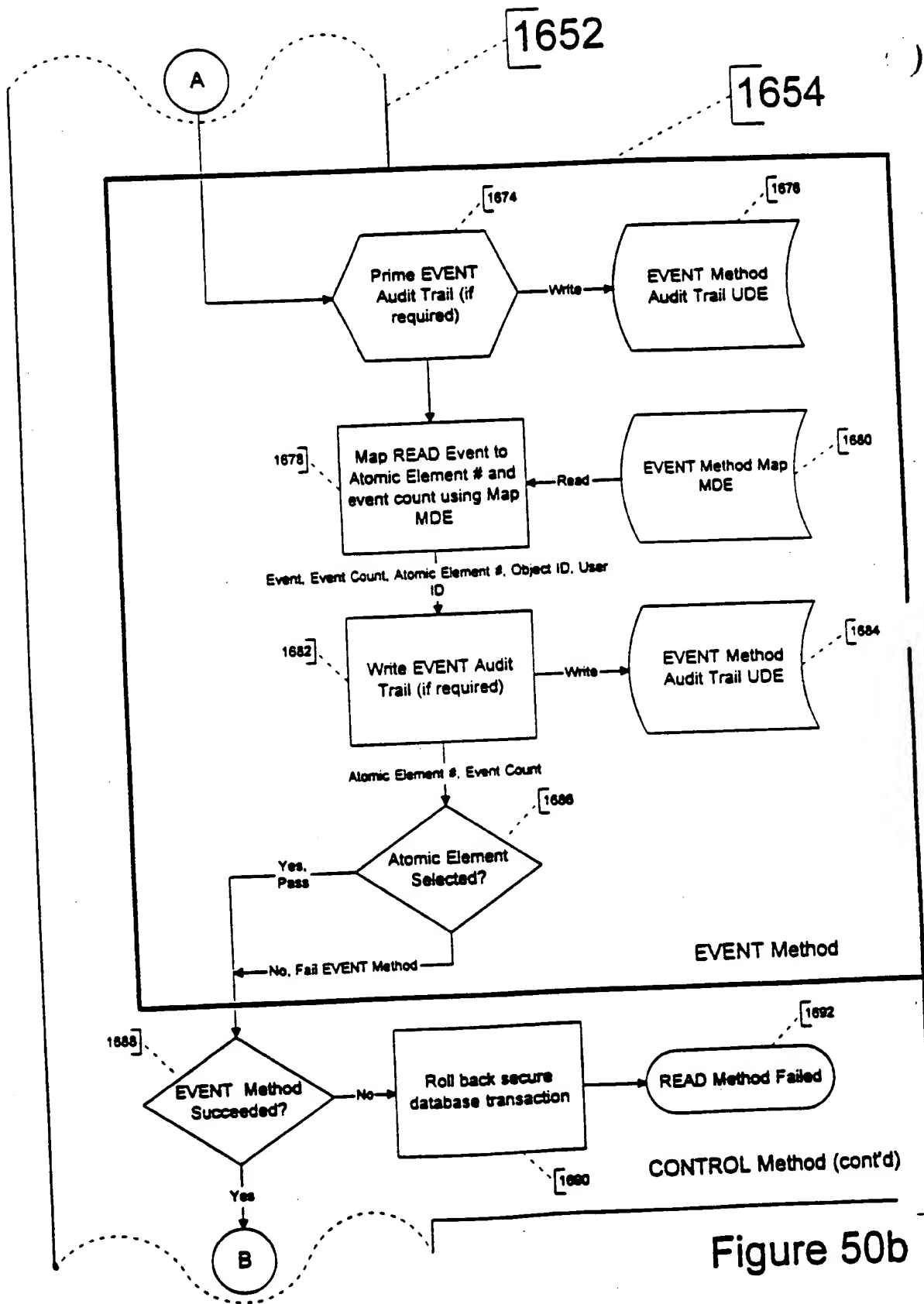


Figure 50b

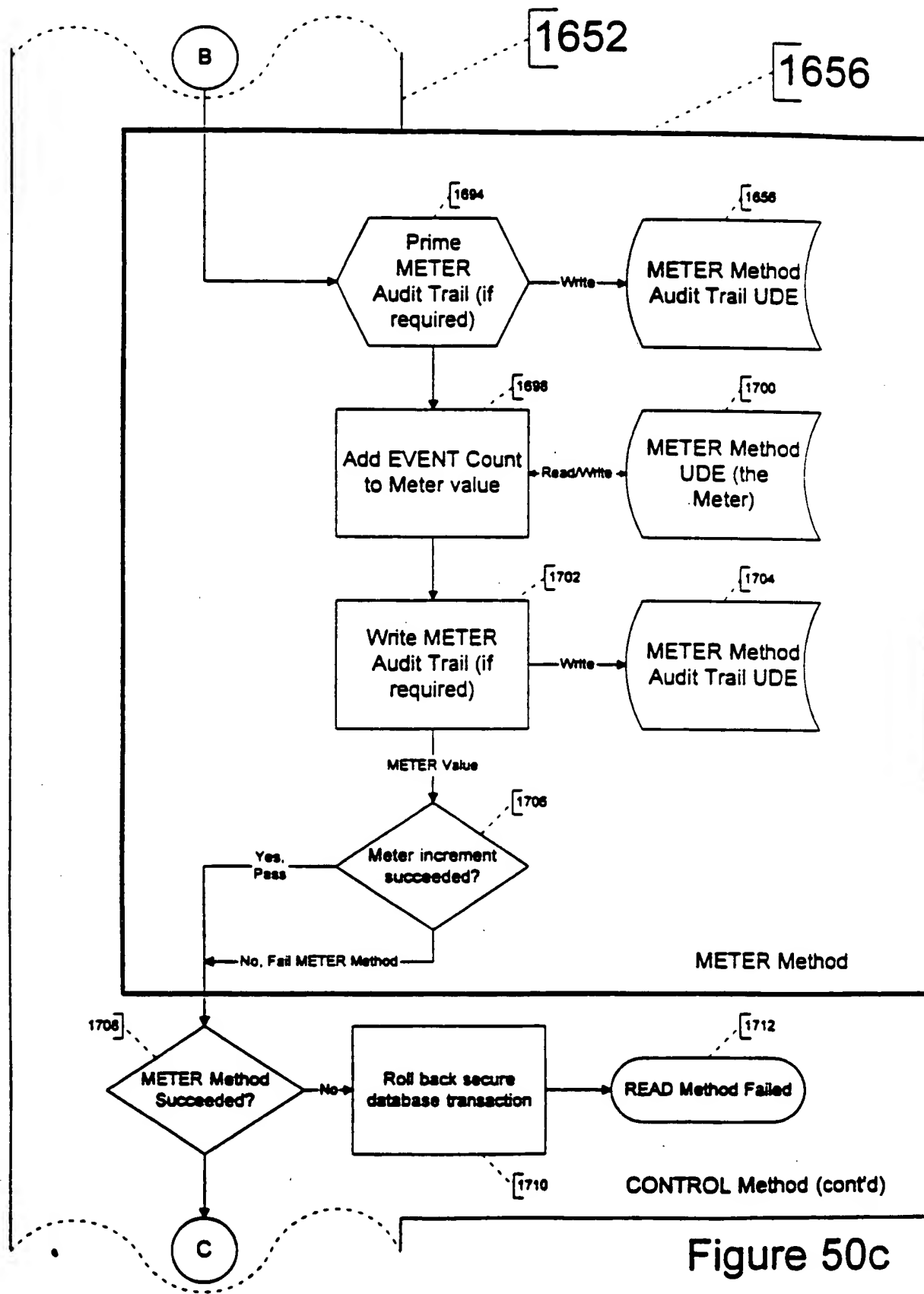


Figure 50c

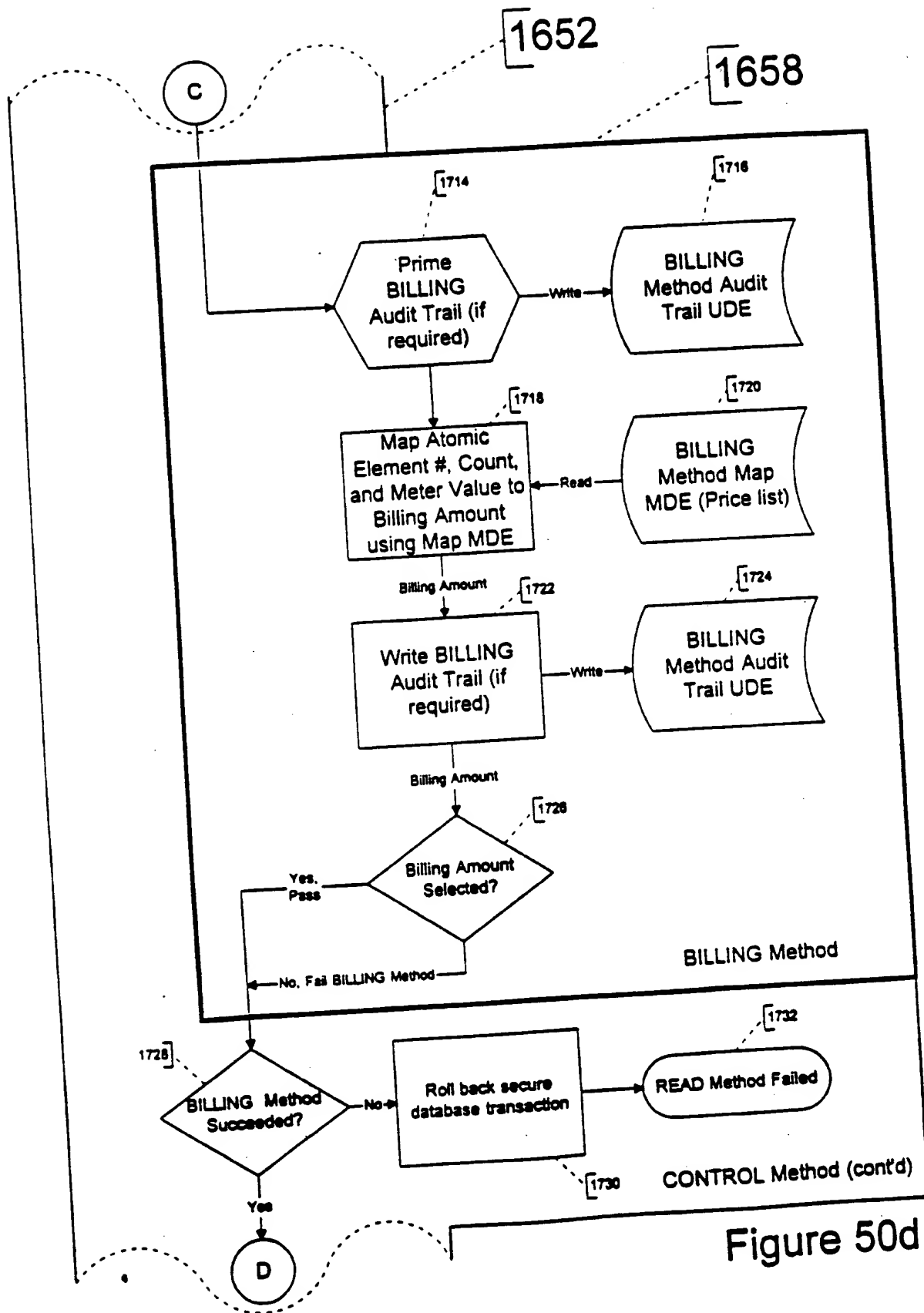


Figure 50d

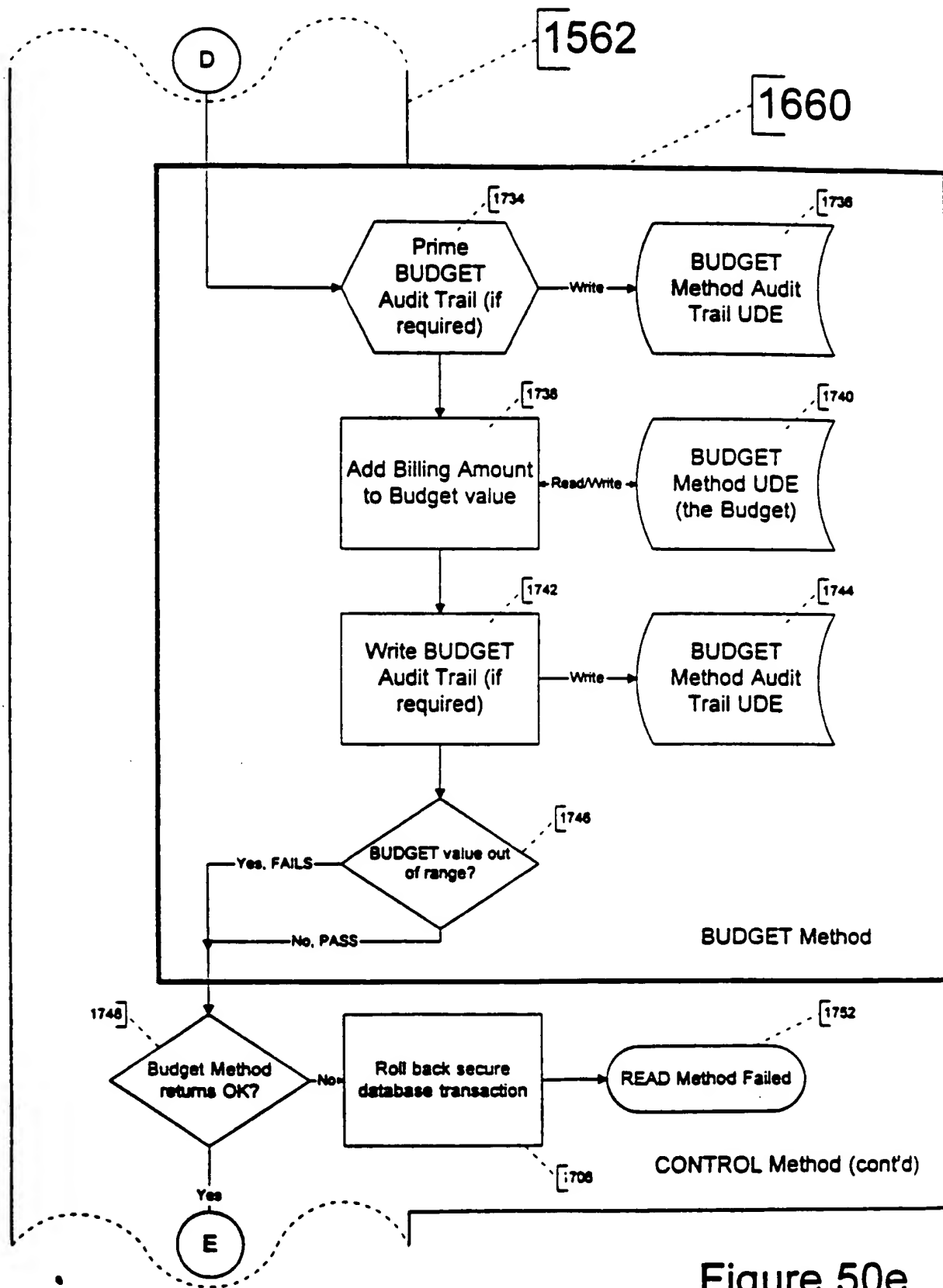
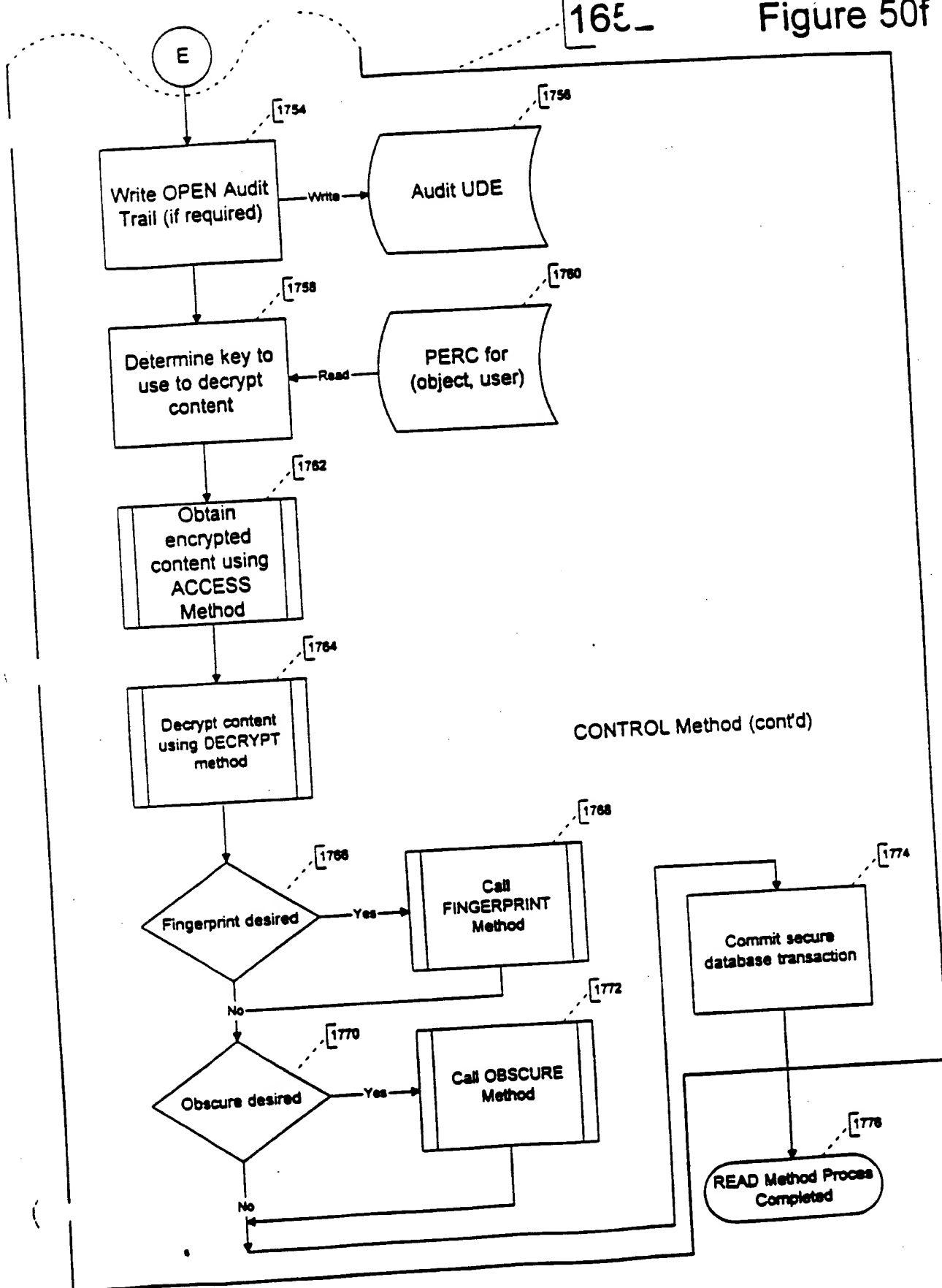


Figure 50e

165

Figure 50f



WRITE Method Use Process Flow

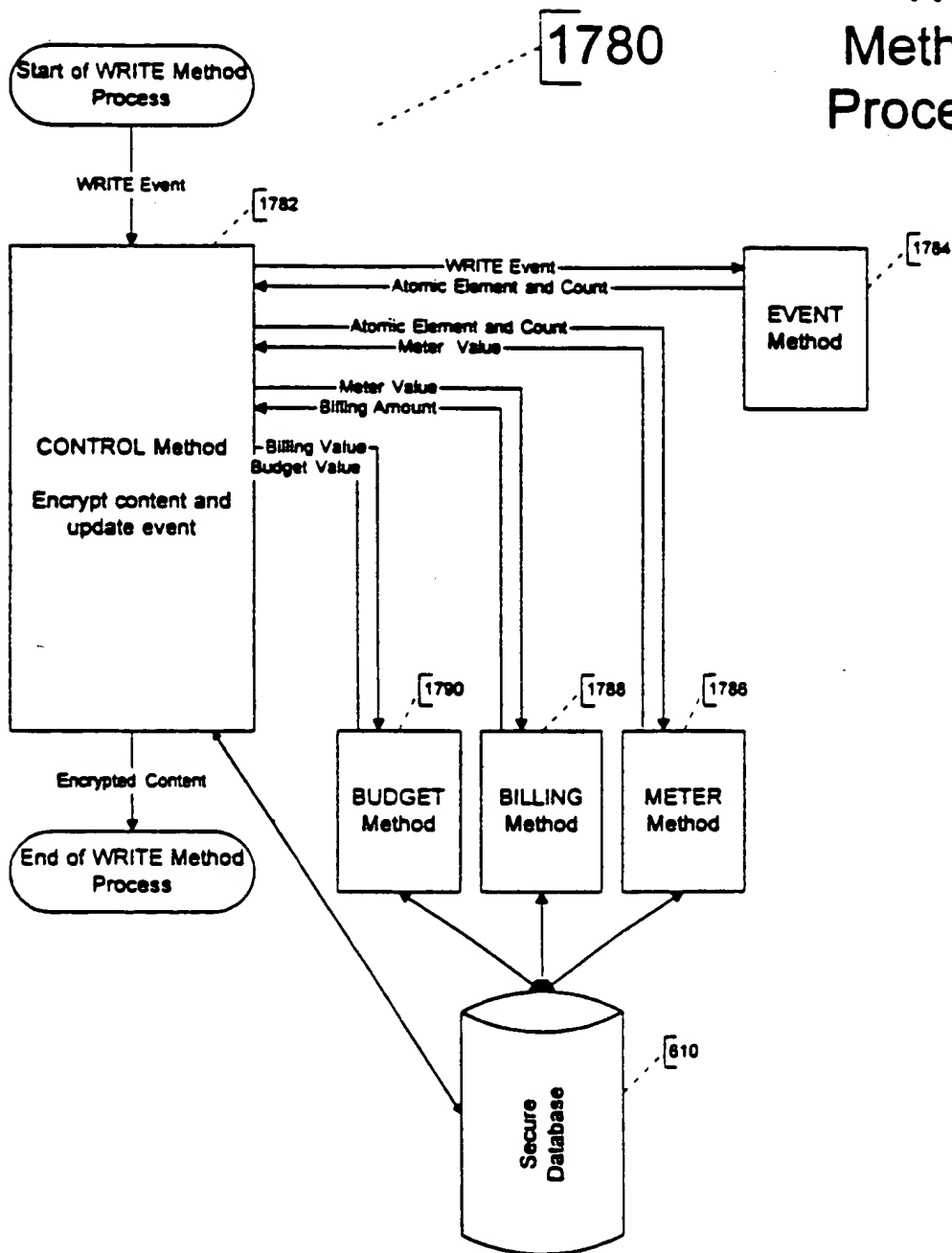


Figure 51

1780

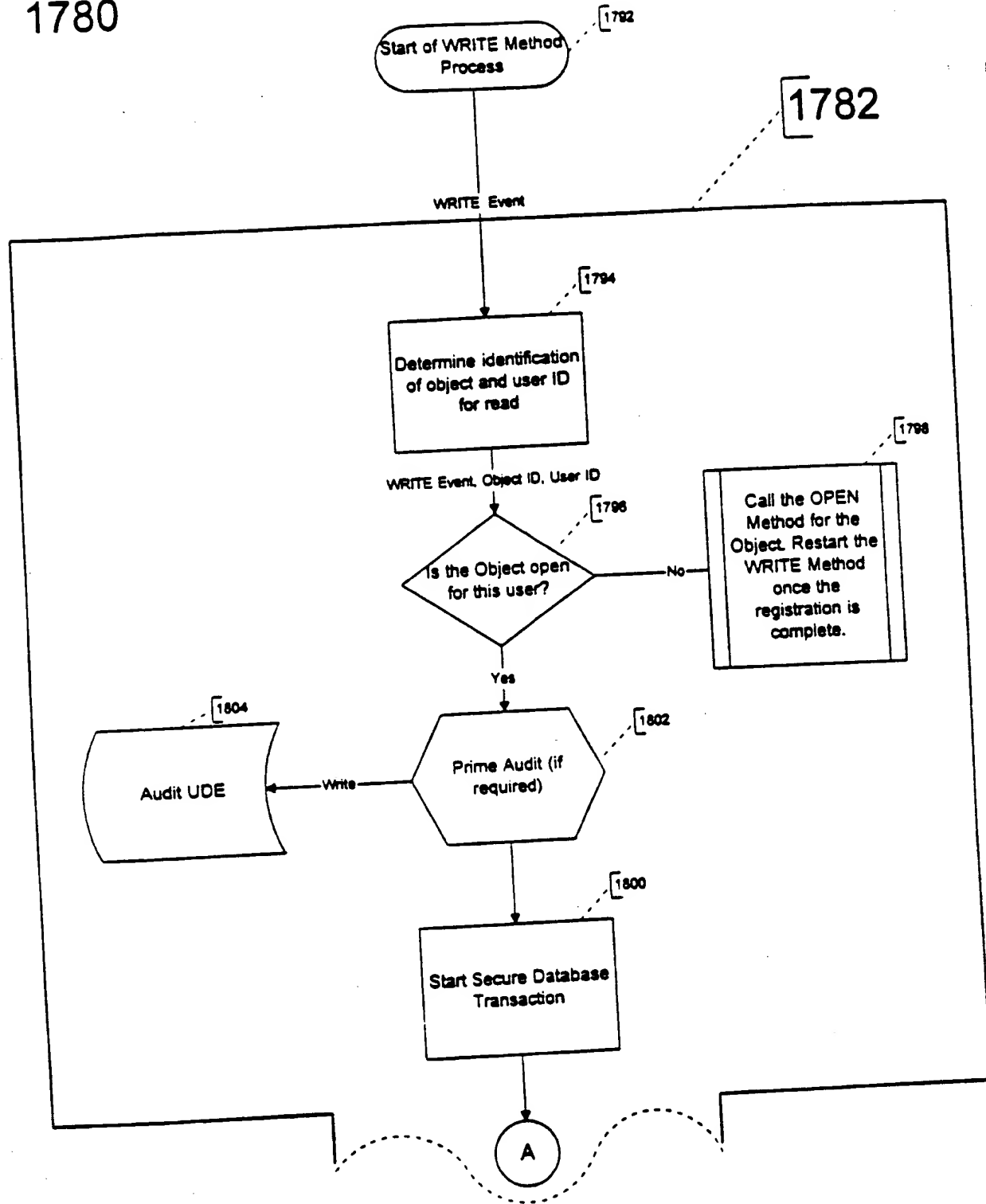


Figure 51a

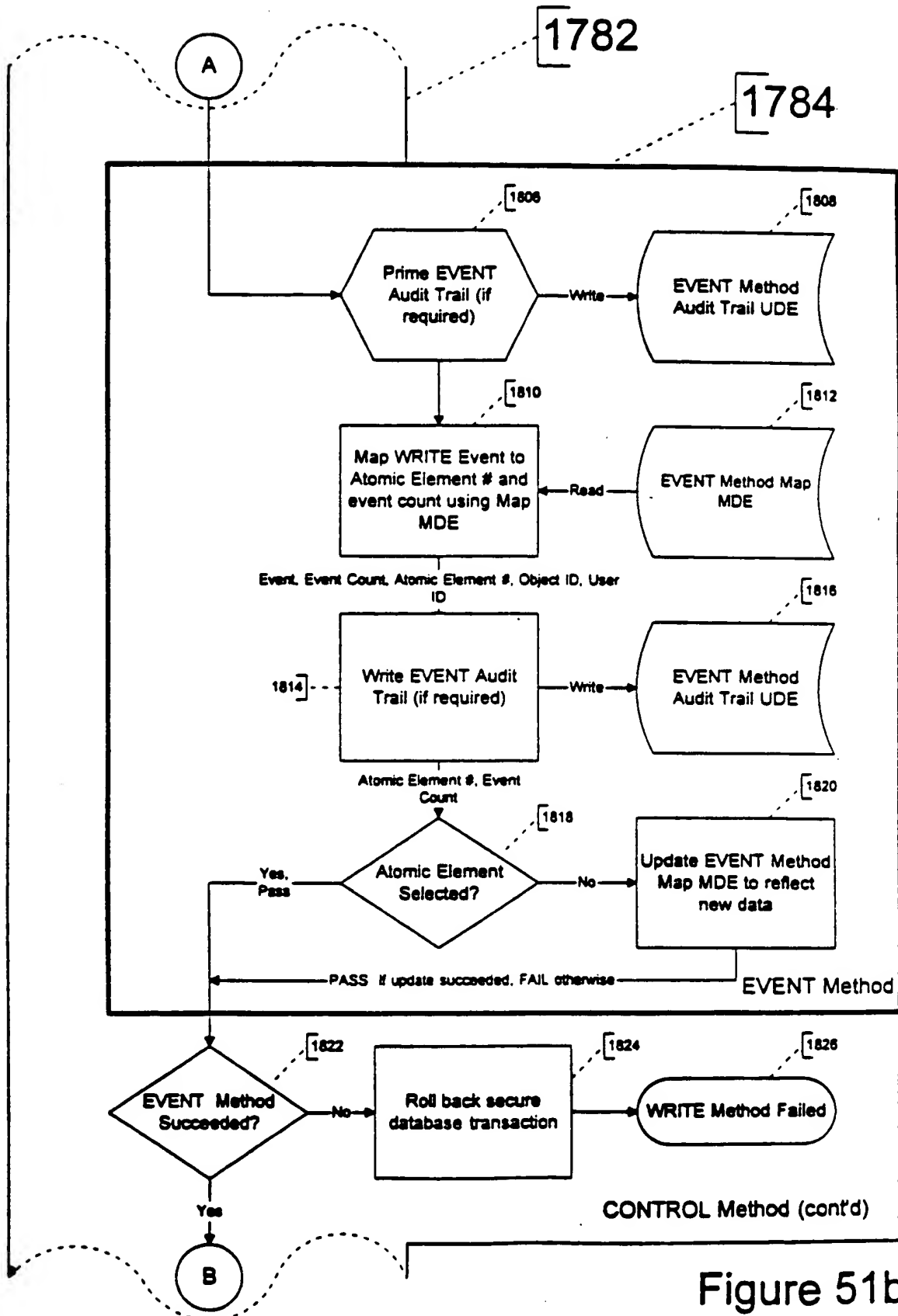


Figure 51b

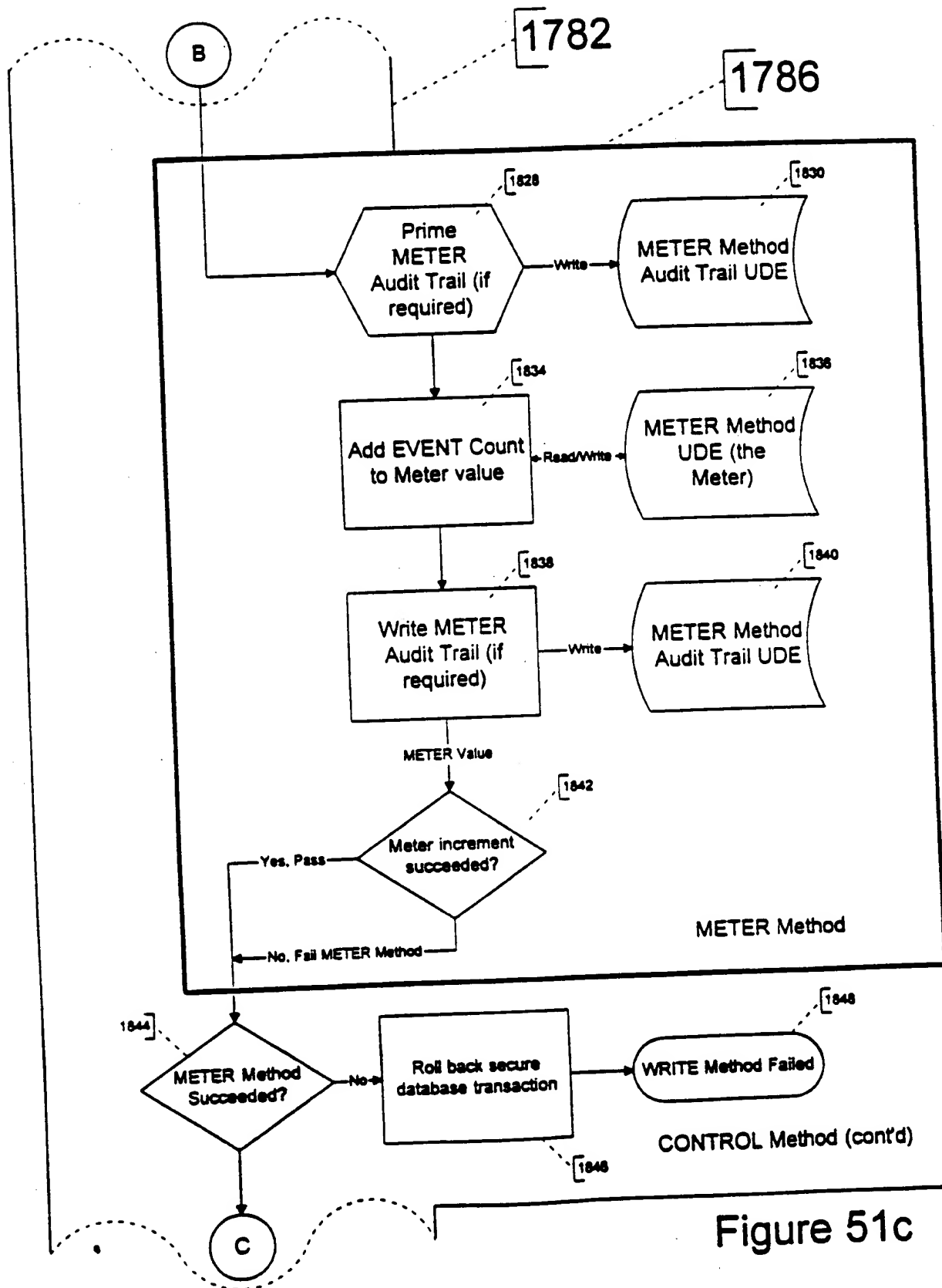


Figure 51c

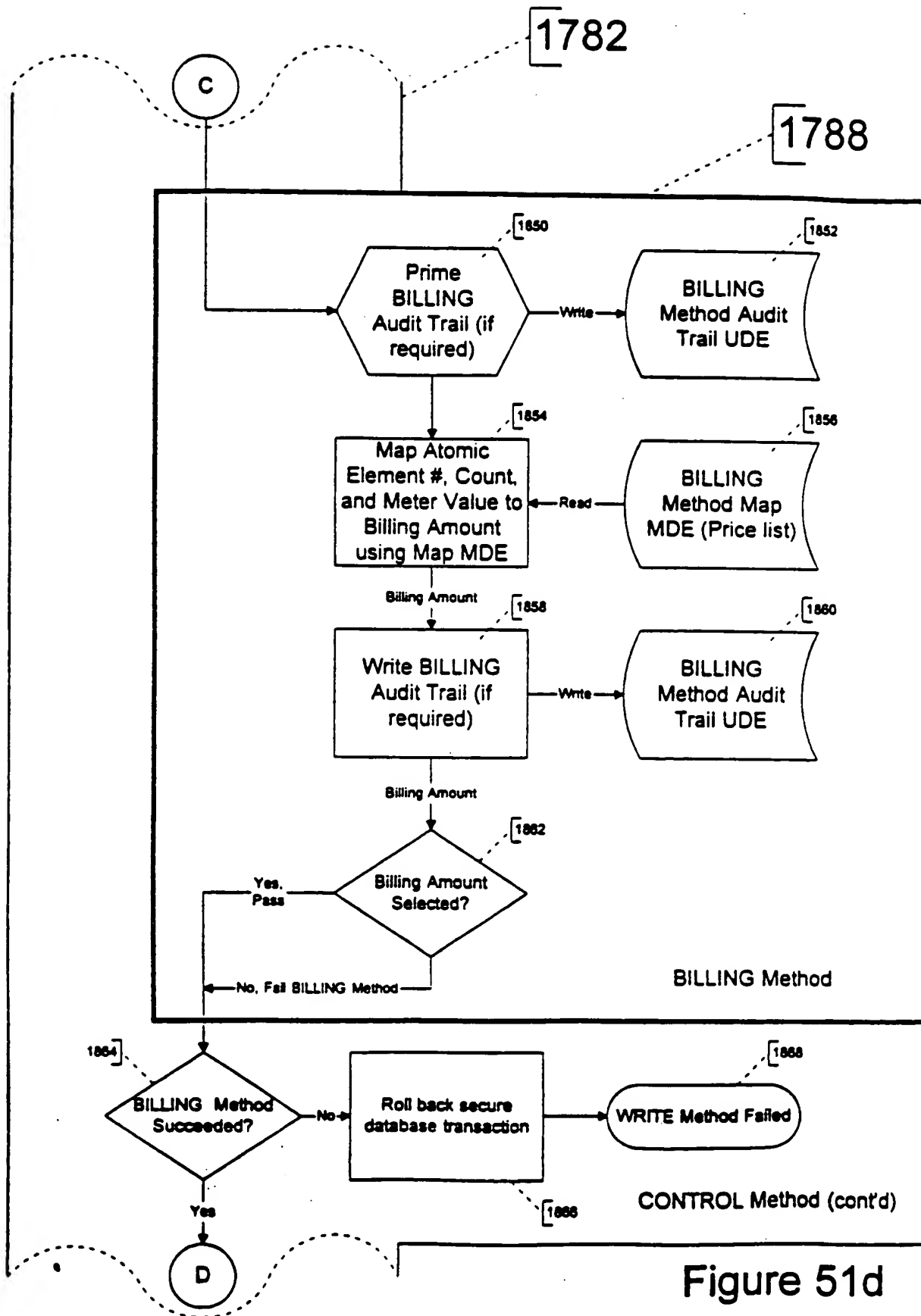


Figure 51d

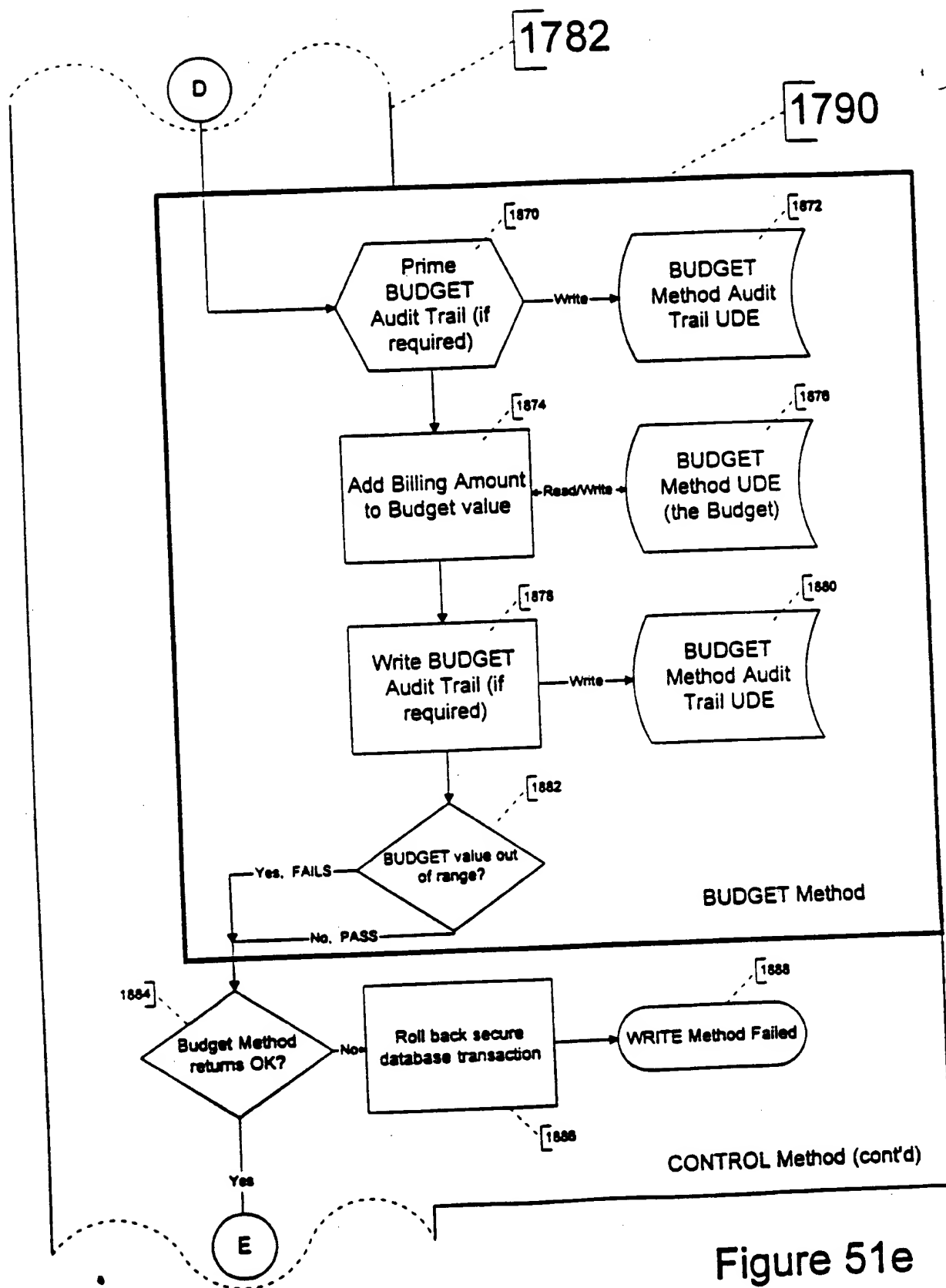


Figure 51e

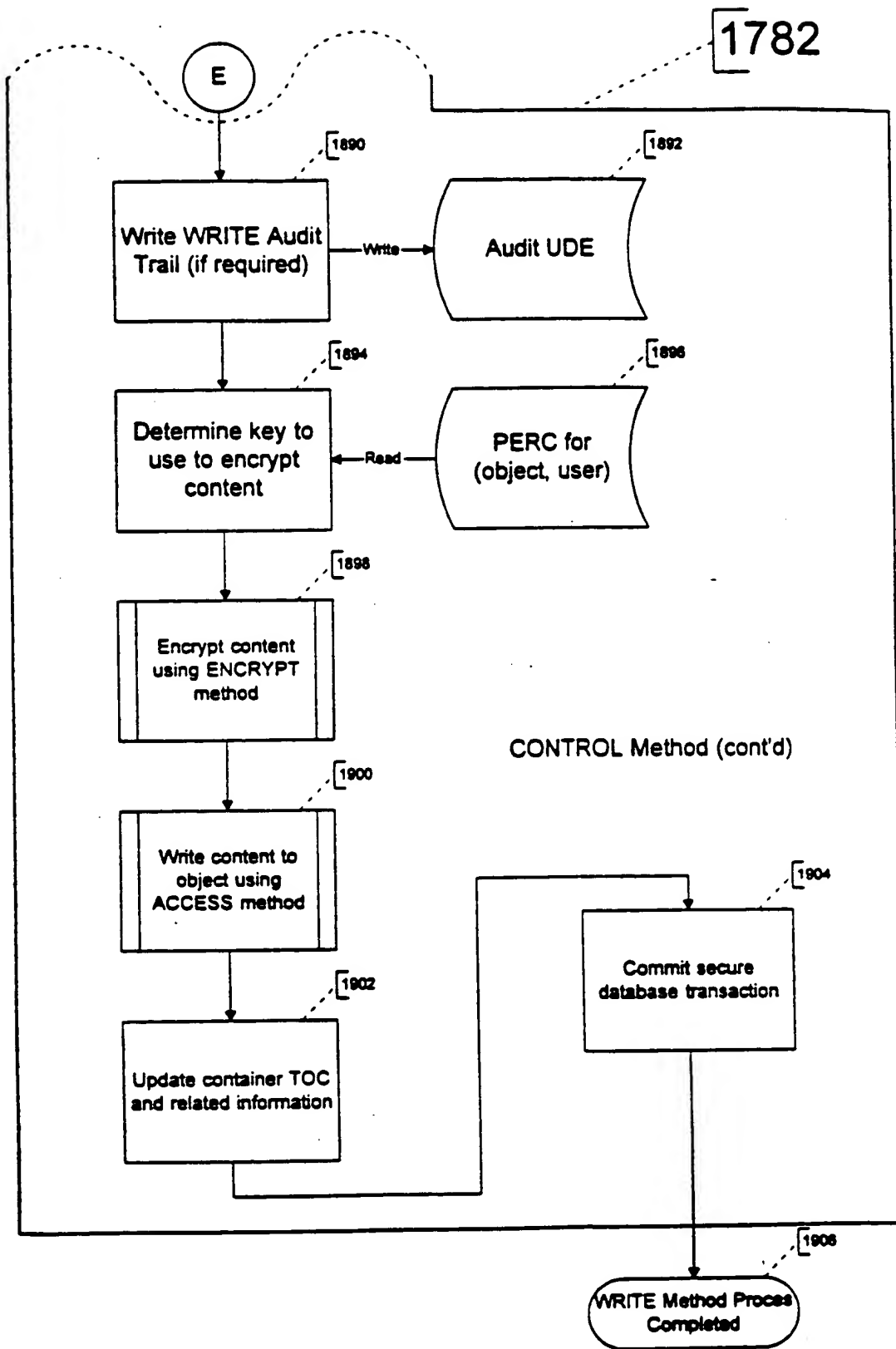
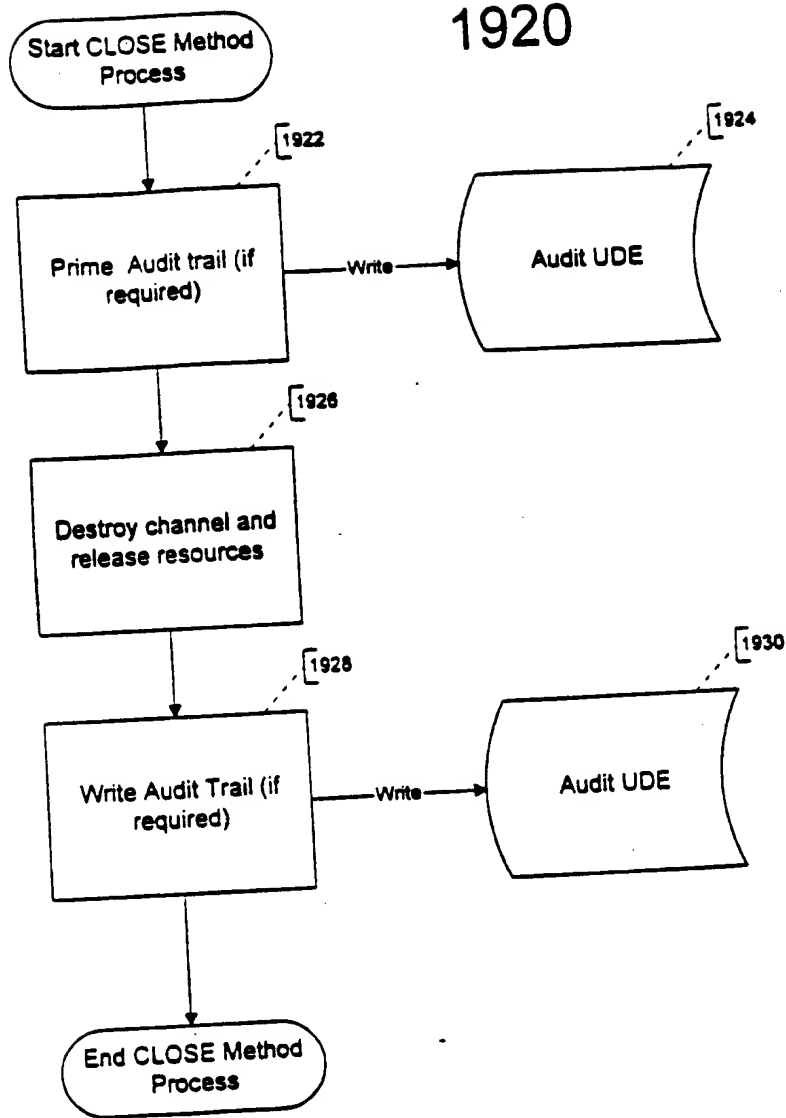


Figure 51f



CLOSE Method Process Flow

Figure 52

EVENT Method Process Flows

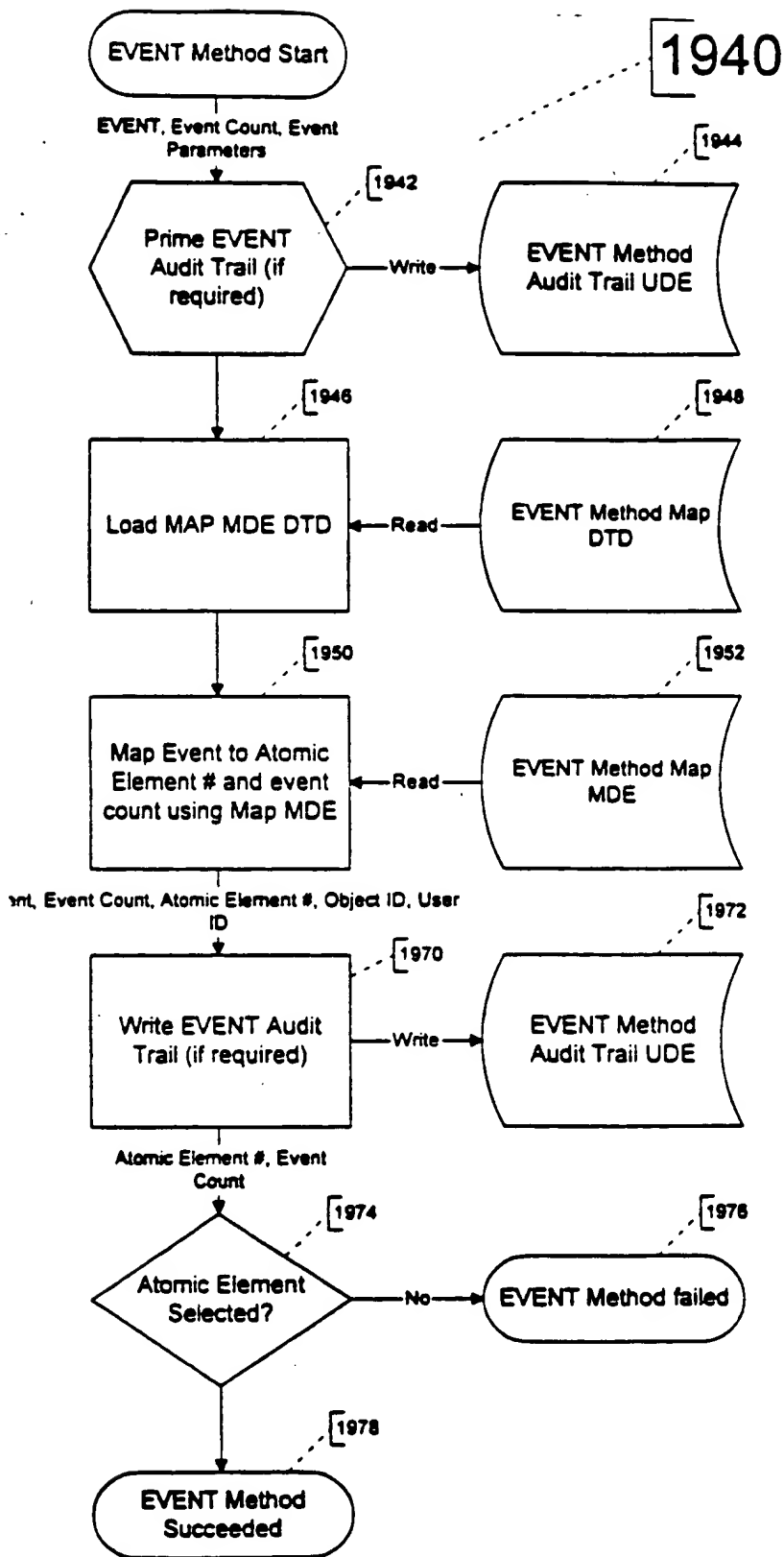


Figure 53a

Sample EVENT Method Mapping Process

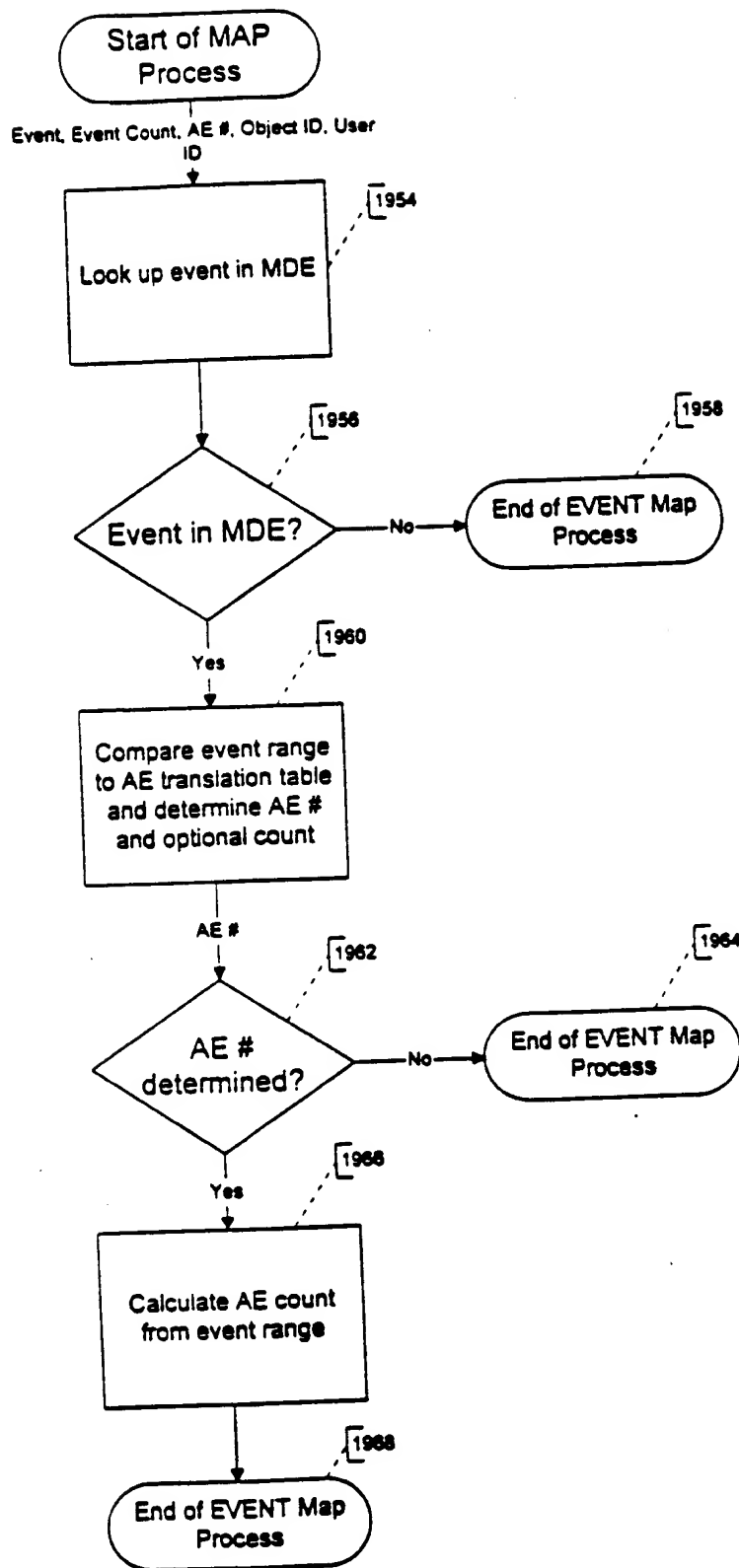
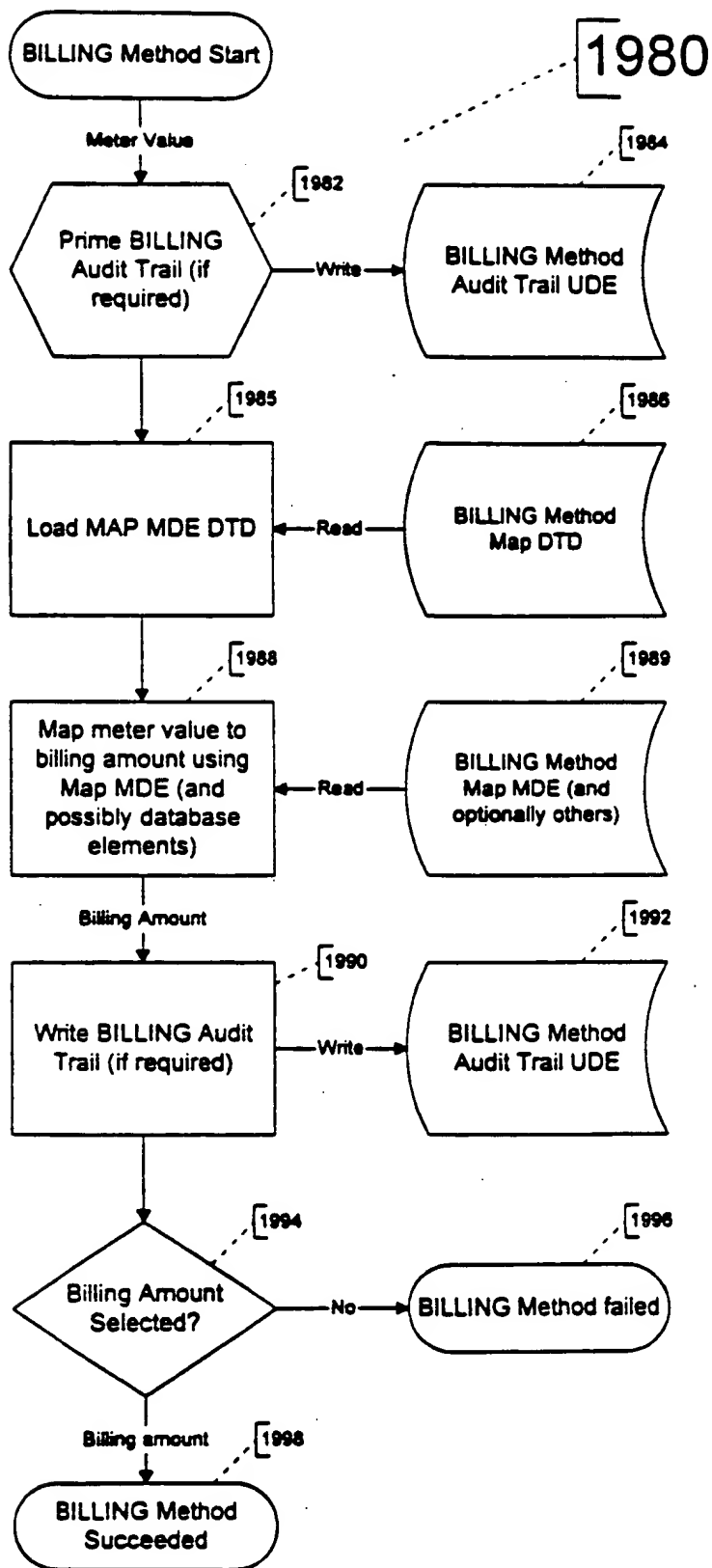


Figure 53b



BILLING Method Process Flows

Figure 53c

ACCESS Method Process Flow

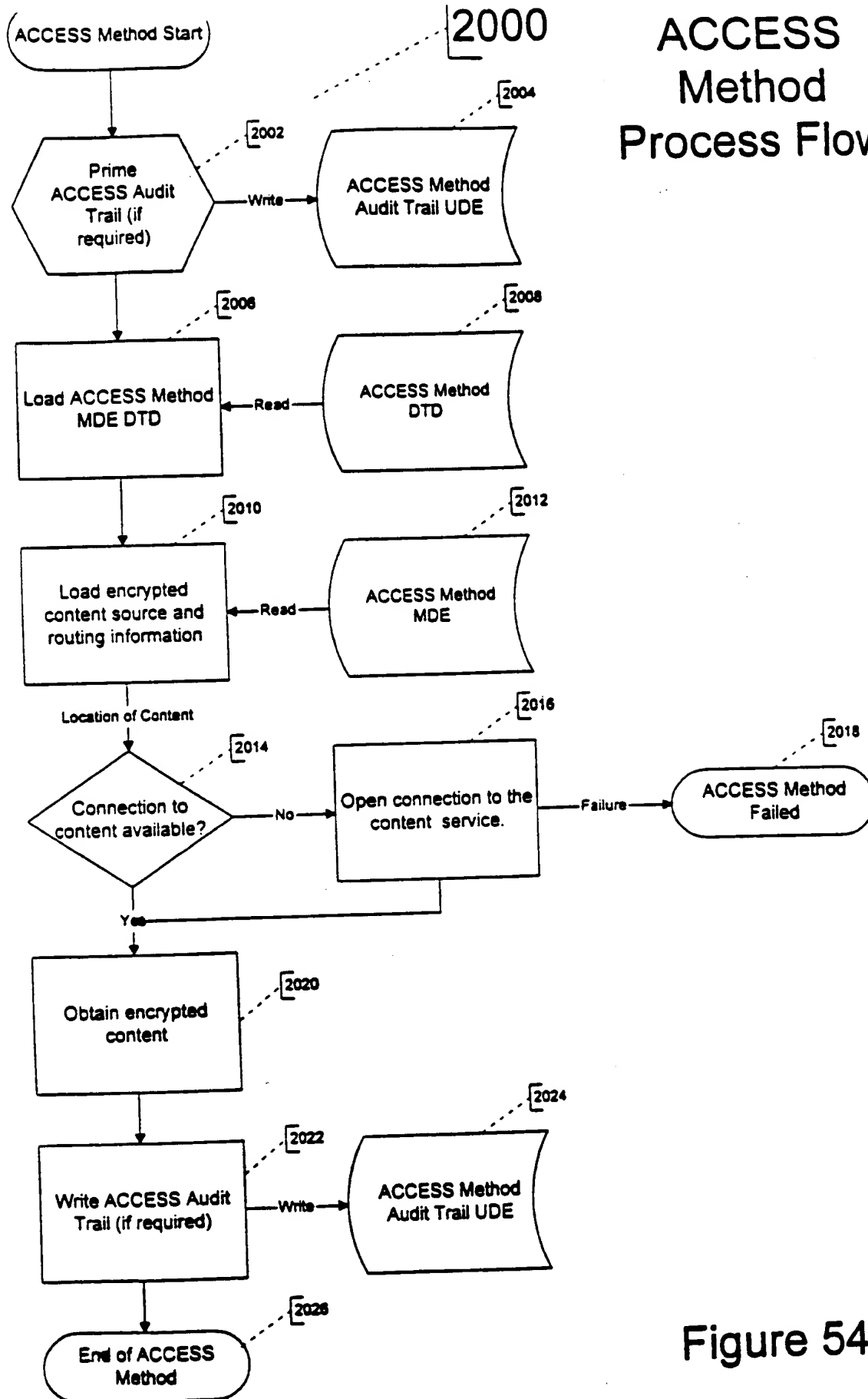


Figure 54

DECRYPT Method Process Flow

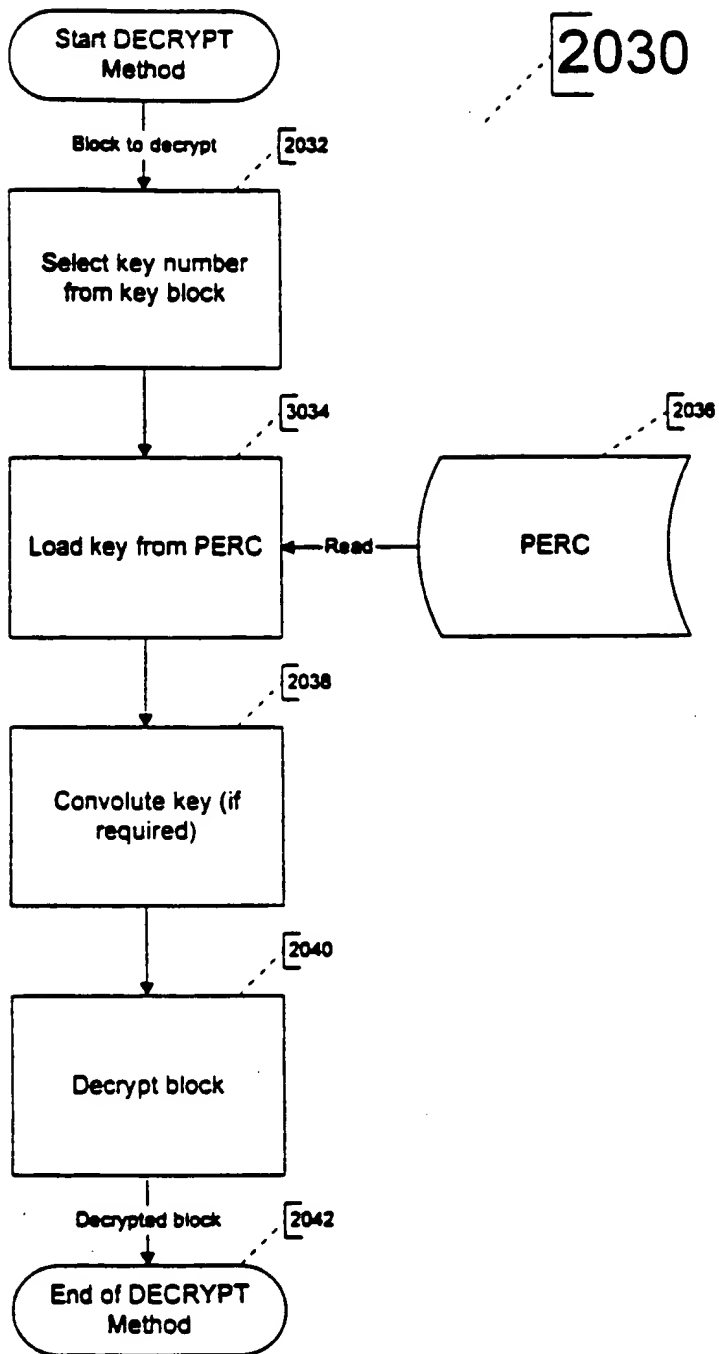


Figure 55a

ENCRYPT Method Process Flow

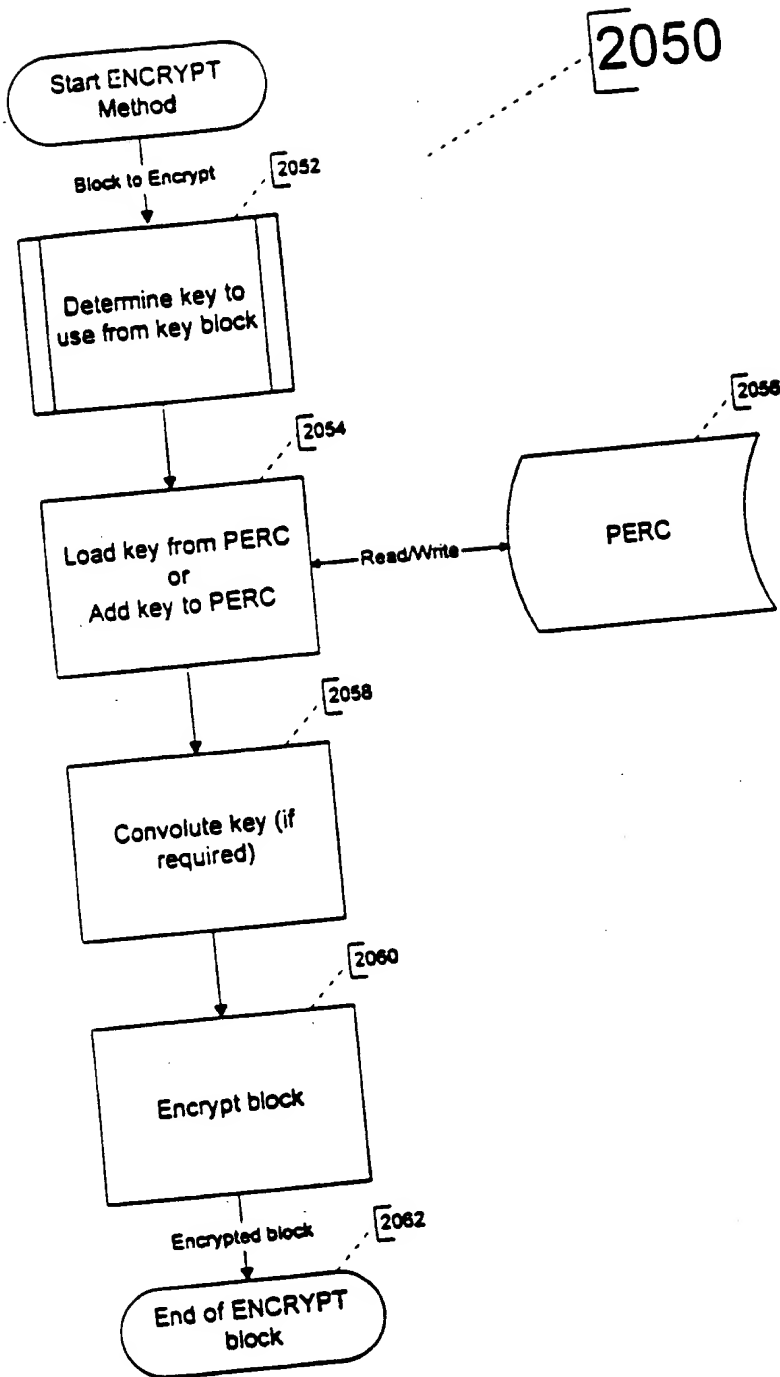


Figure 55b

CONTENT Method Process Flow

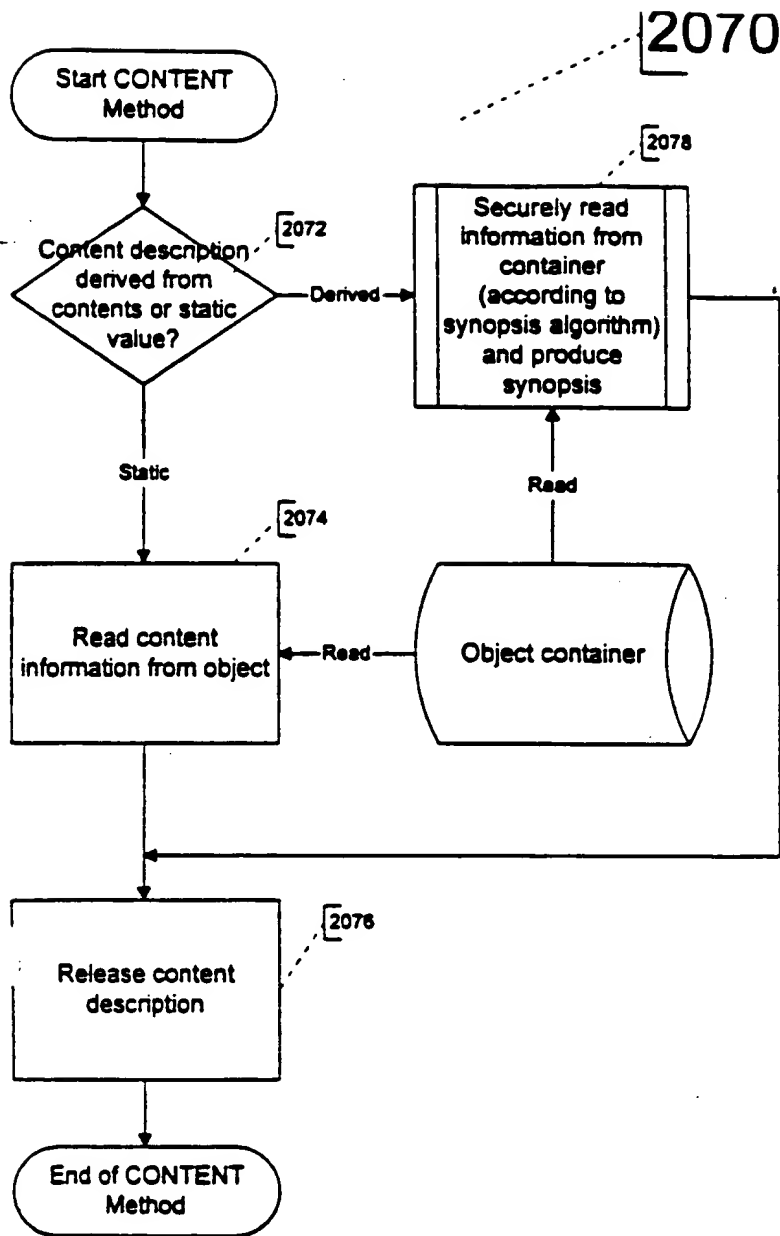


Figure 56

EXTRACT Method Process Flow

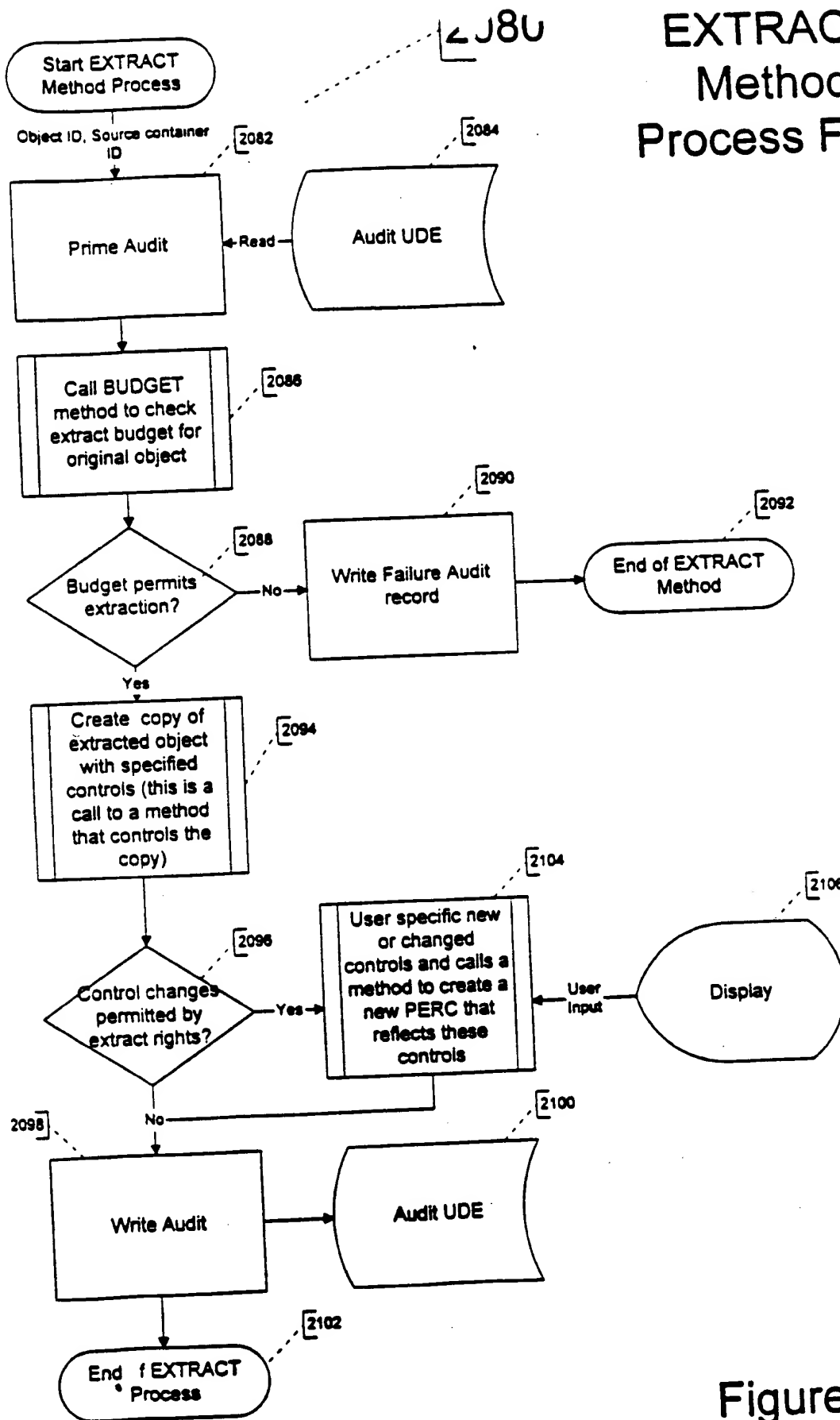


Figure 57a

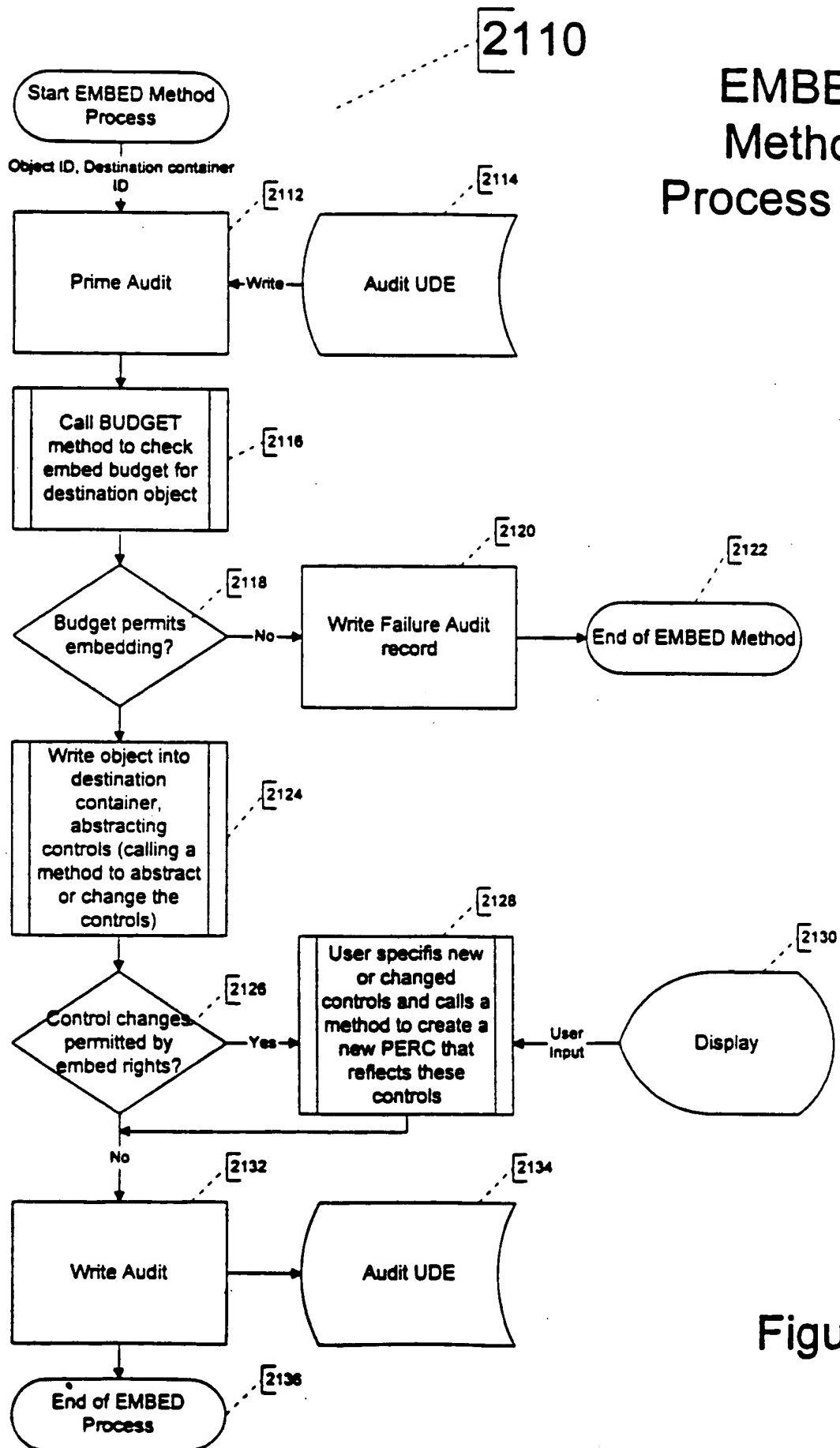
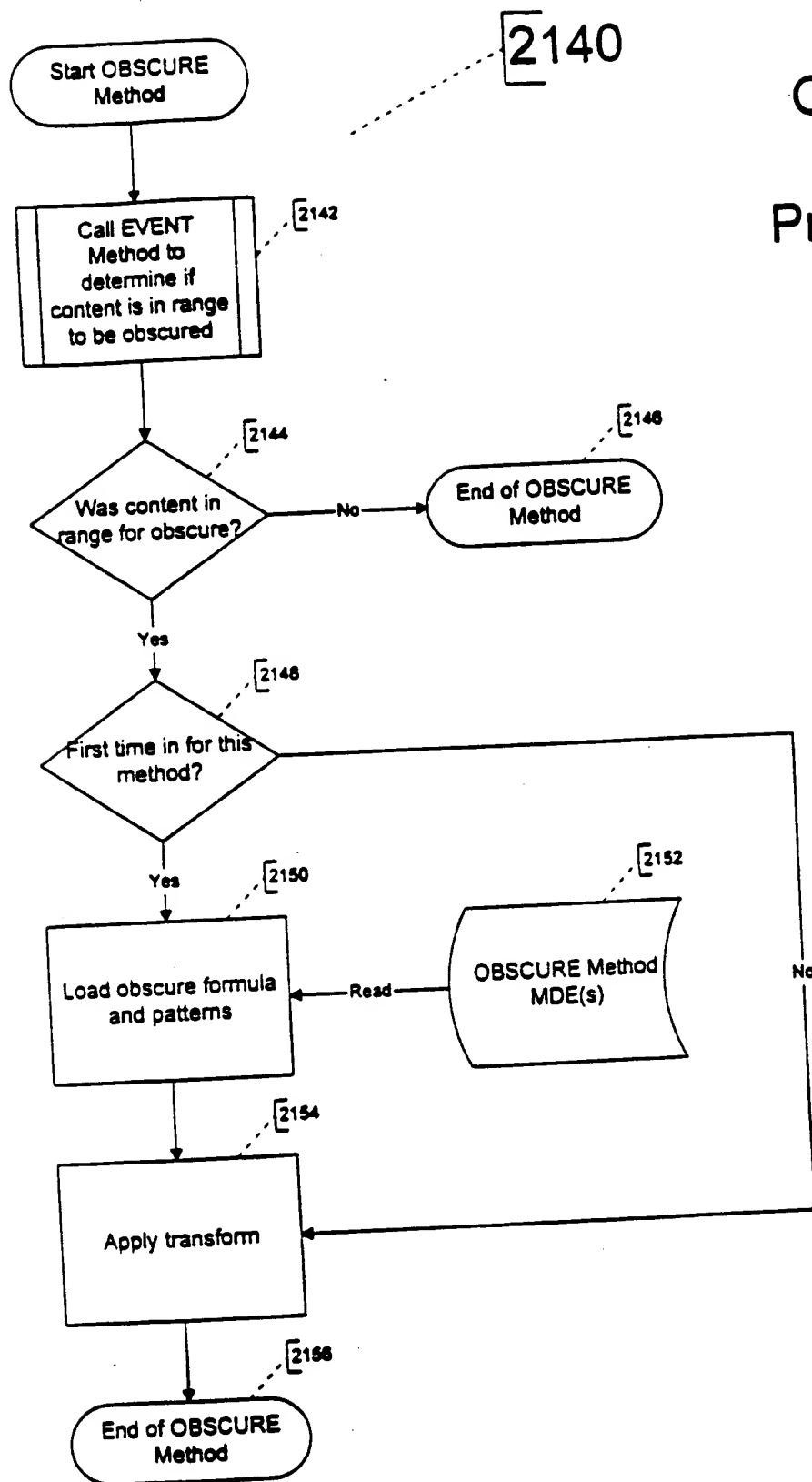


Figure 57b



OBSCURE Method Process Flow

Figure 58a

FINGERPRINT Method Process Flow

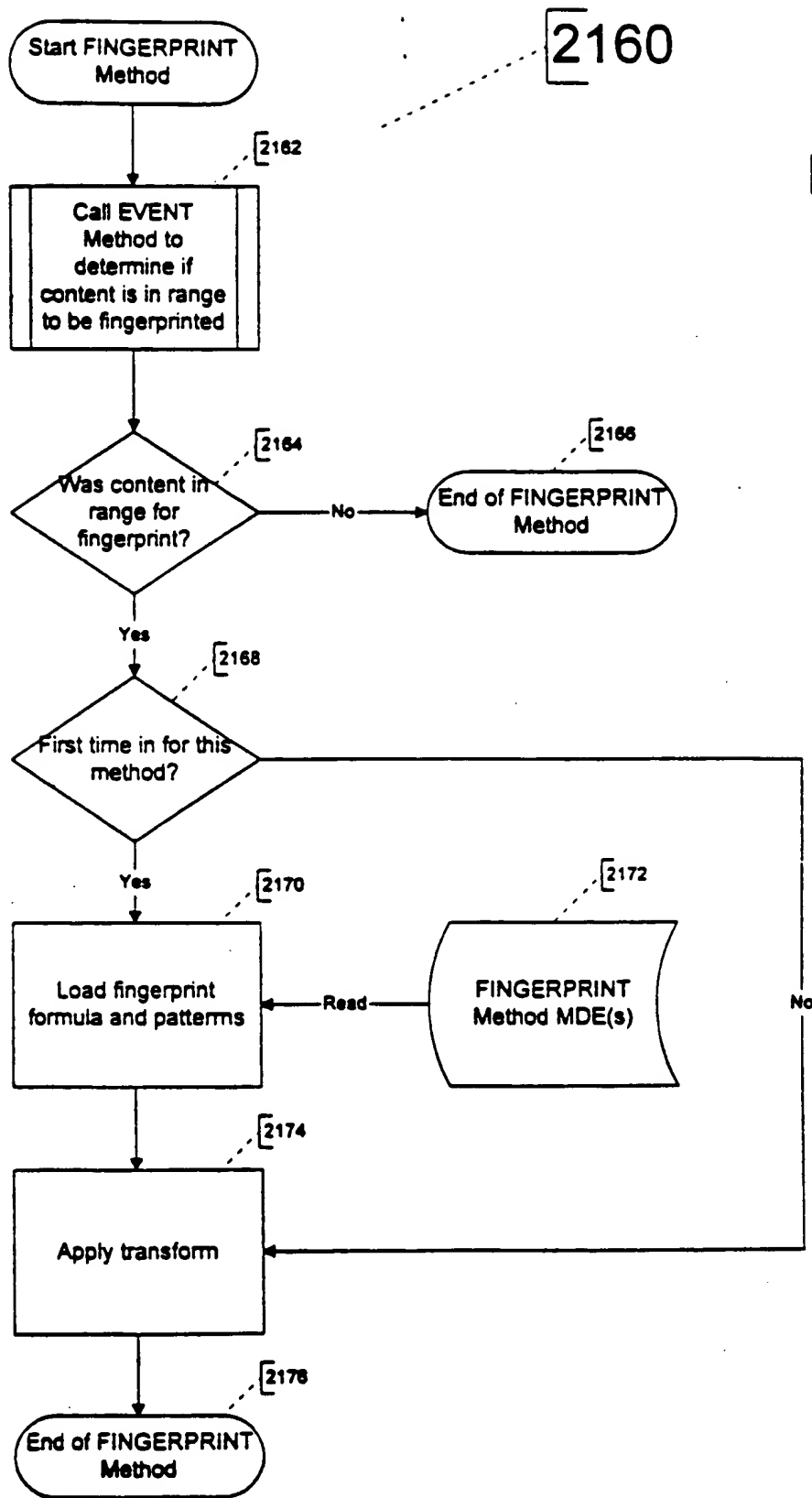


Figure 58b

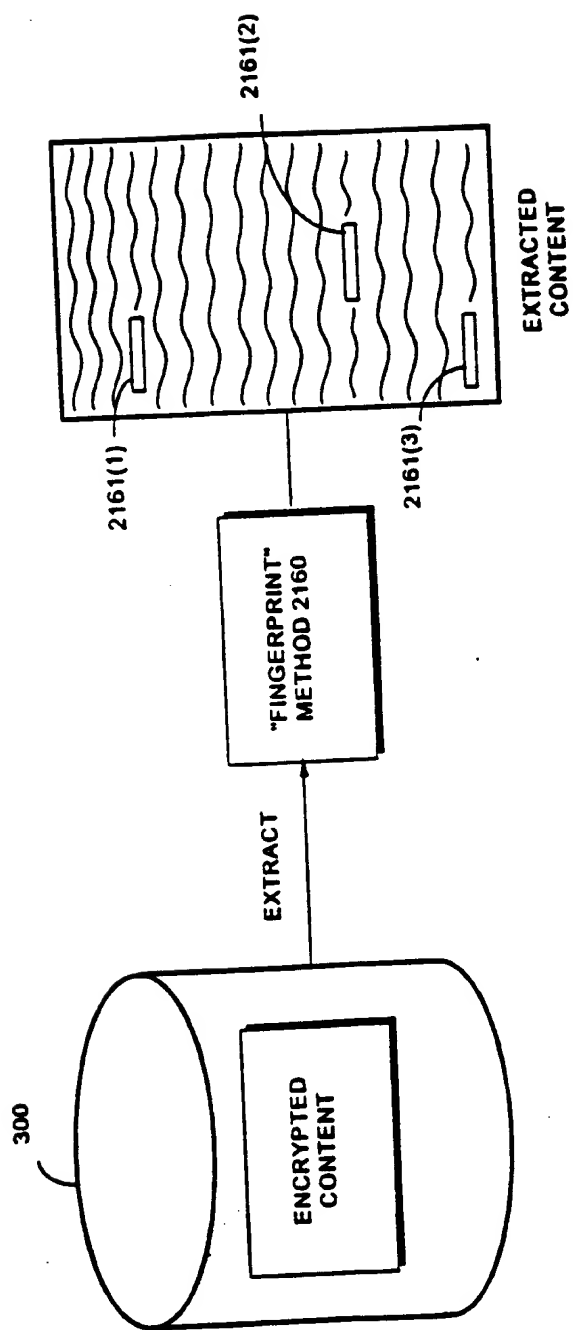
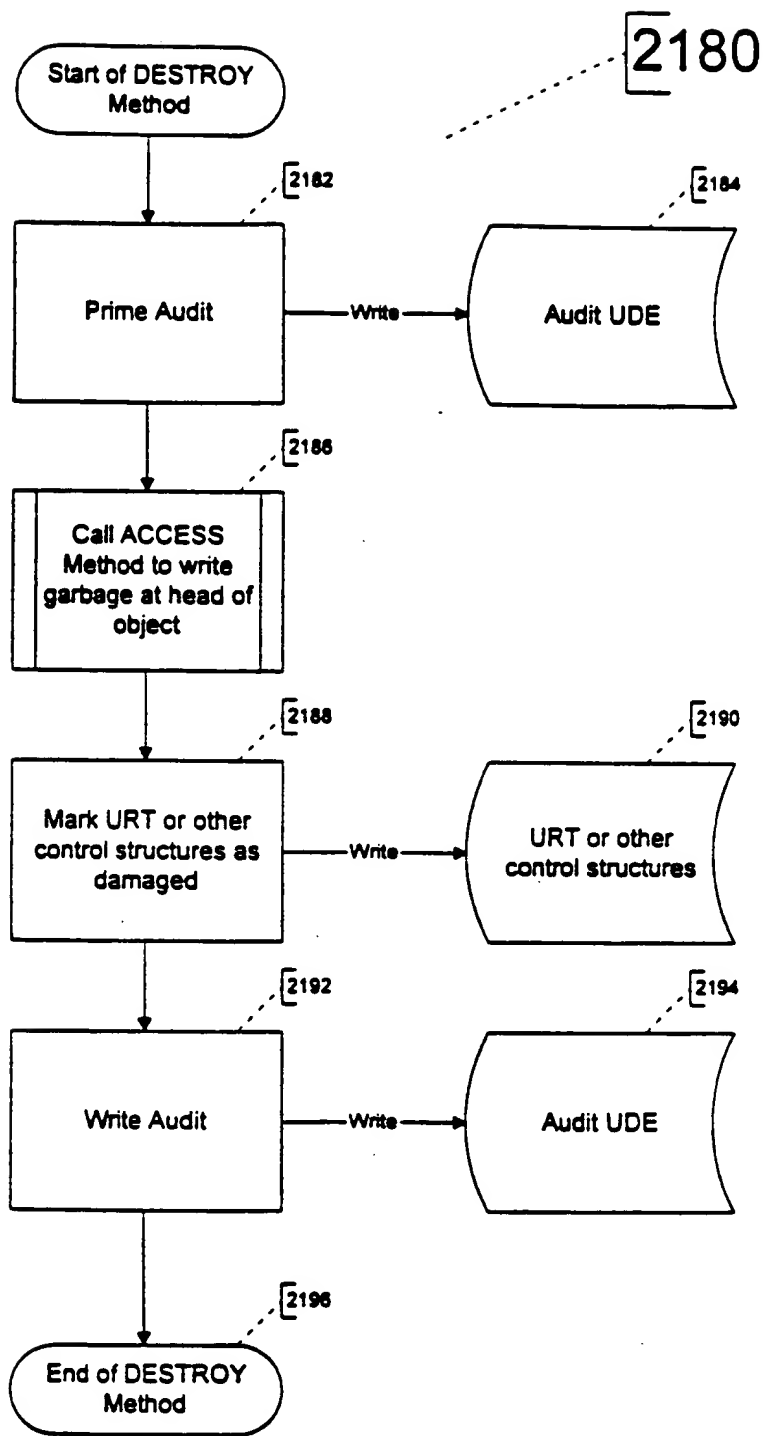


FIG. 58C



DESTROY Method Process Flow

Figure 59

PANIC Method Process Flow

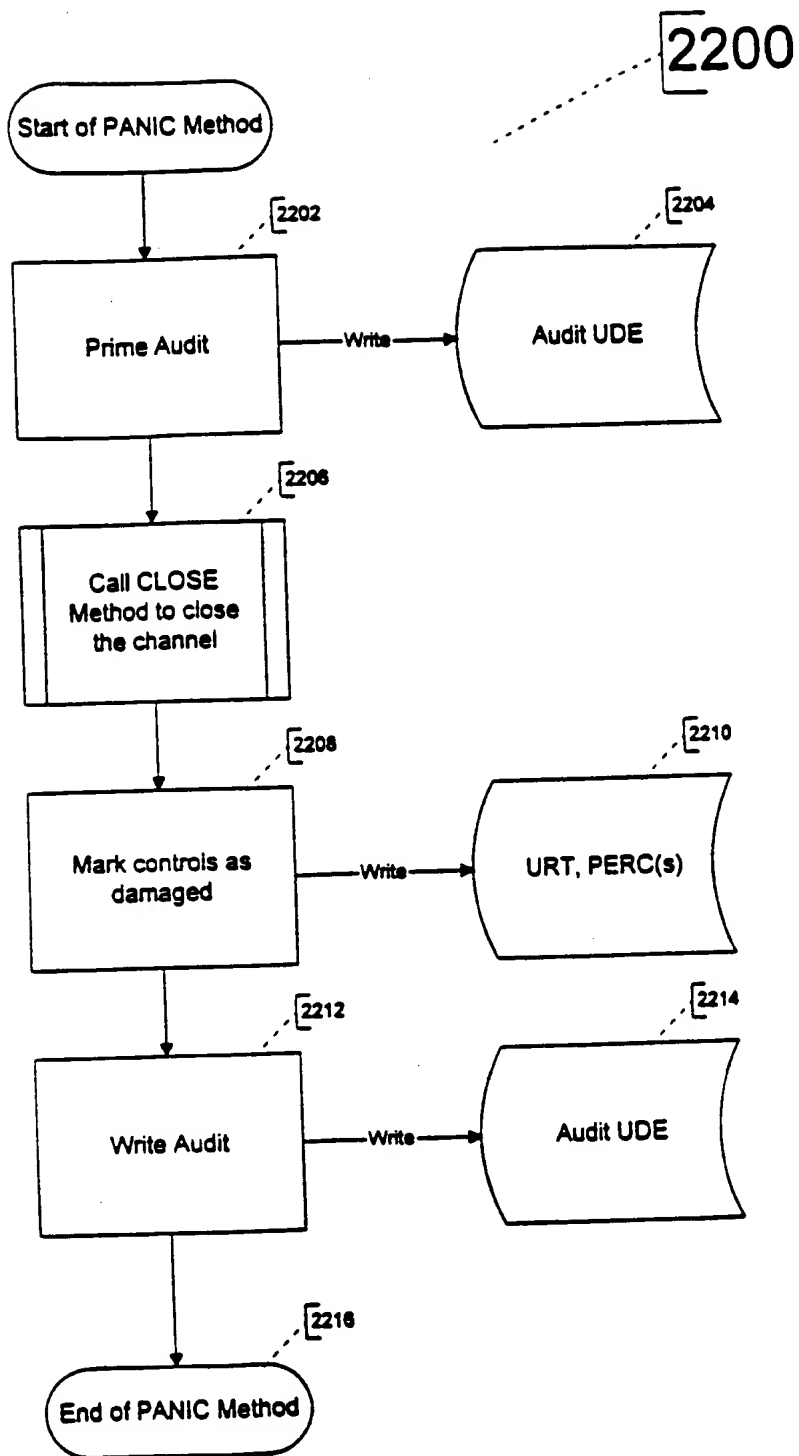


Figure 60

METER Method Use Process Flow

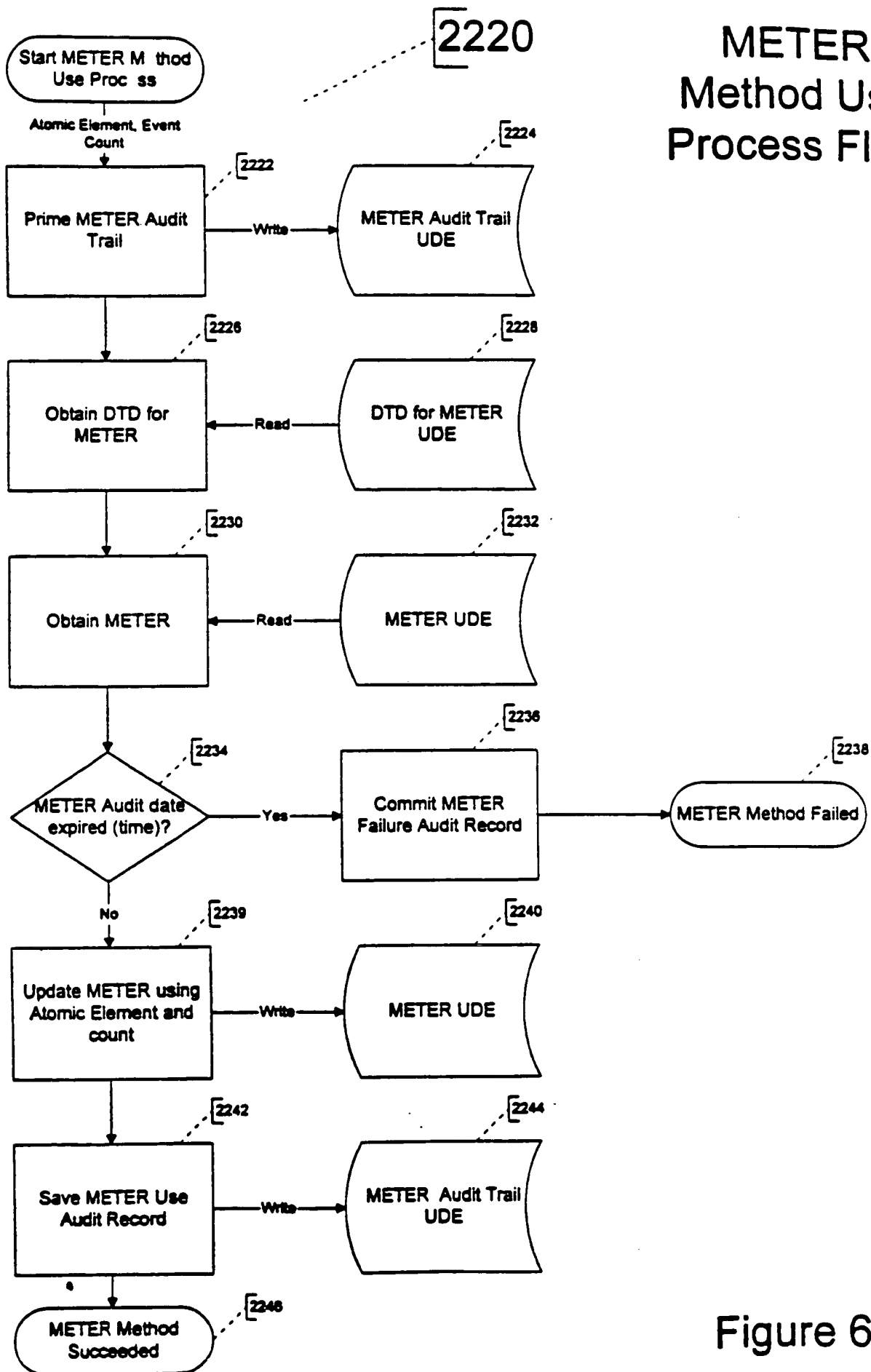
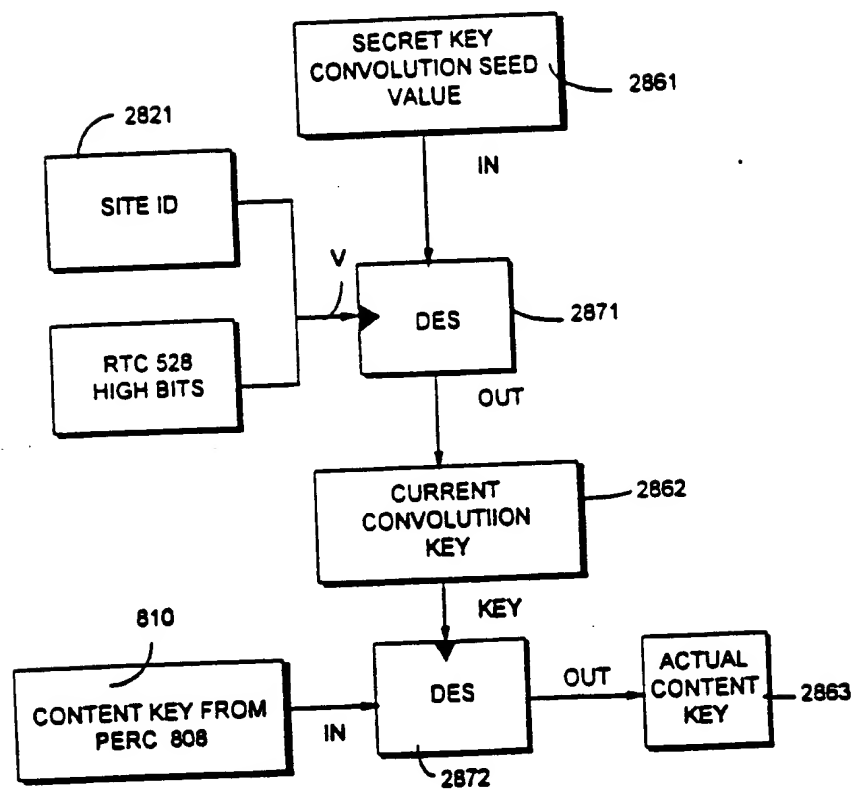


Figure 61

FIG. 62
KEY CONVOLUTION PROCESS



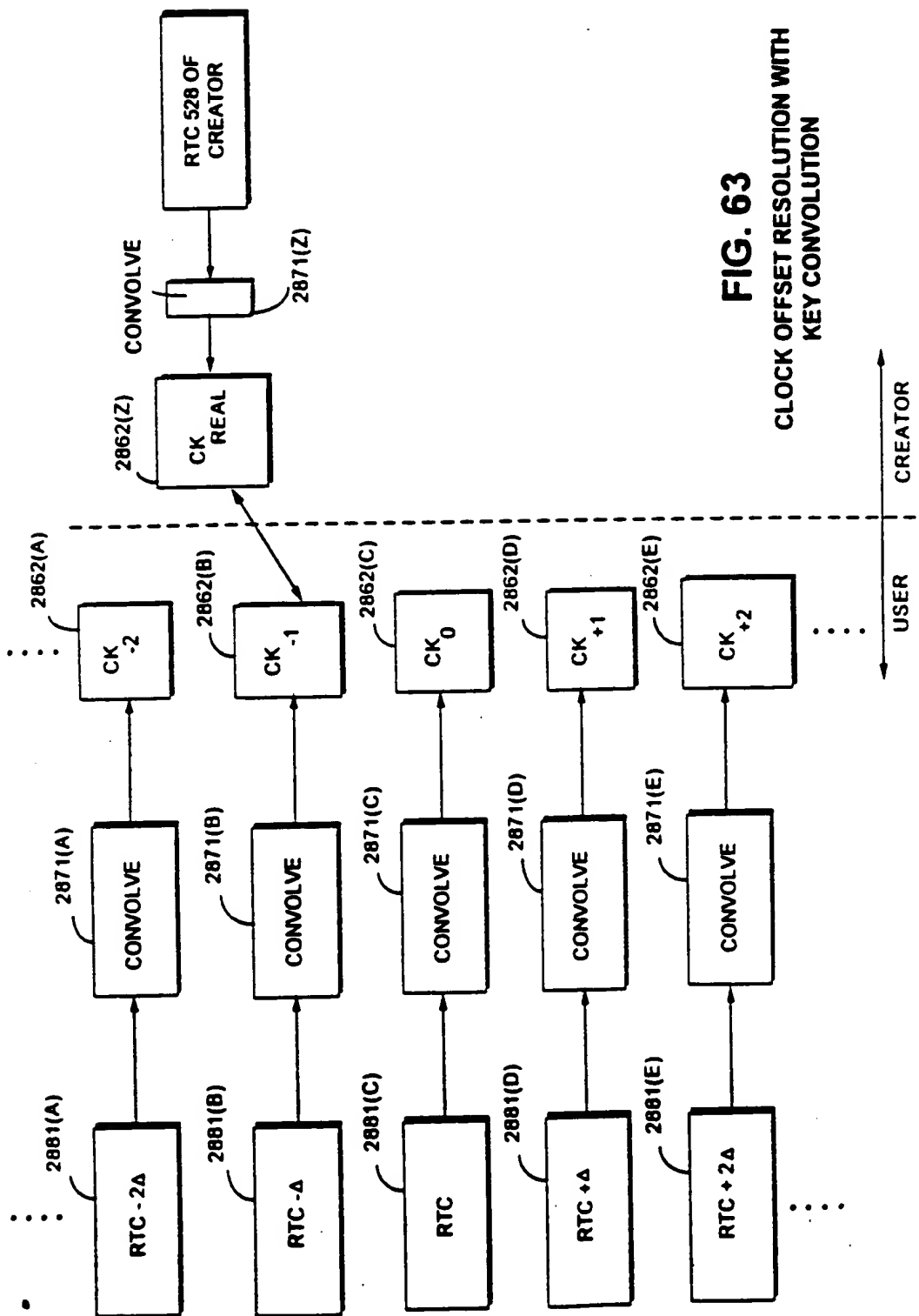


FIG. 63

**CLOCK OFFSET RESOLUTION WITH
KEY CONVOLUTION**

FIG. 64

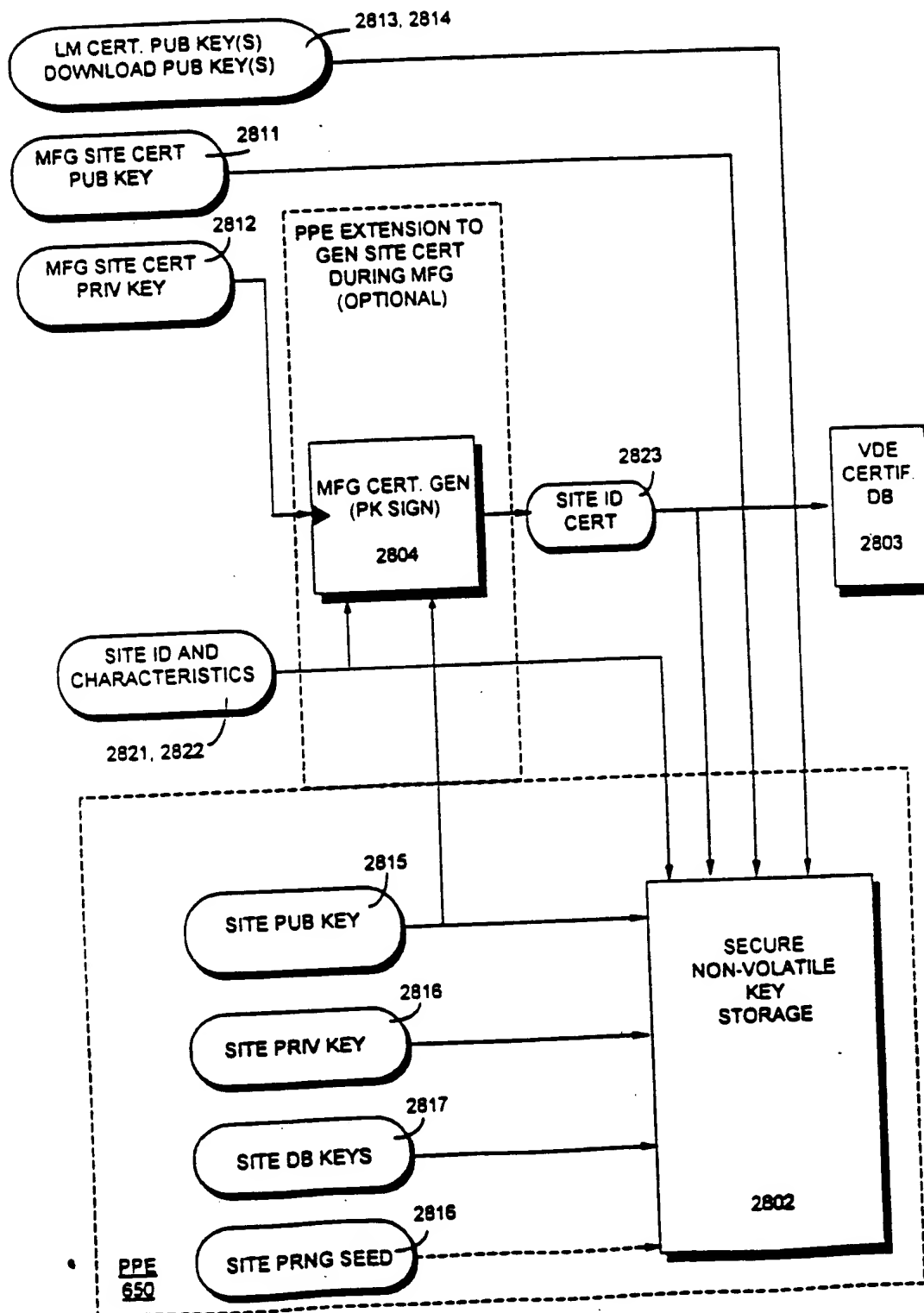
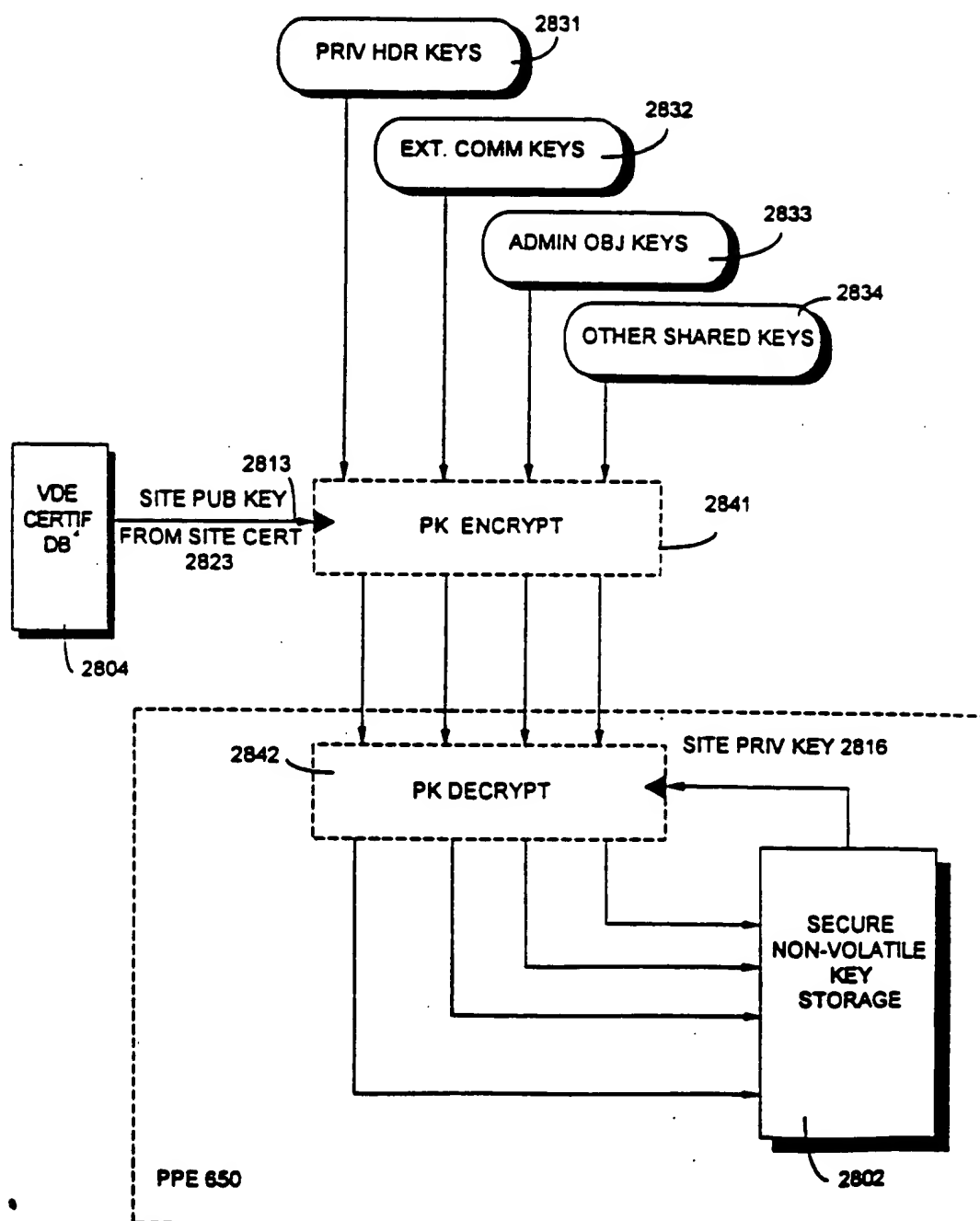


FIG. 65 KEY INSTALLATION & UPDATE



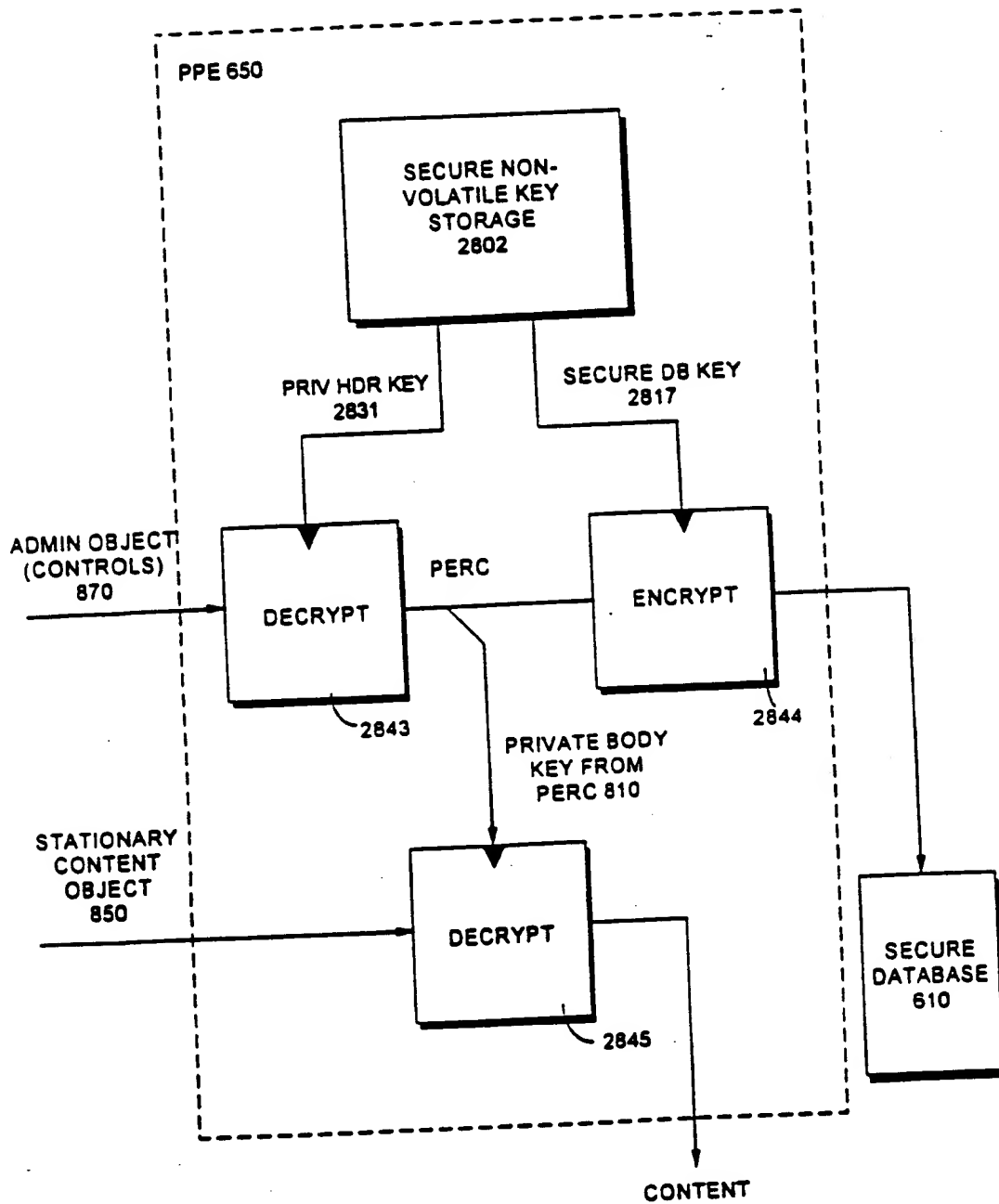


FIG. 66 STATIONARY OBJECT DECRYPTION

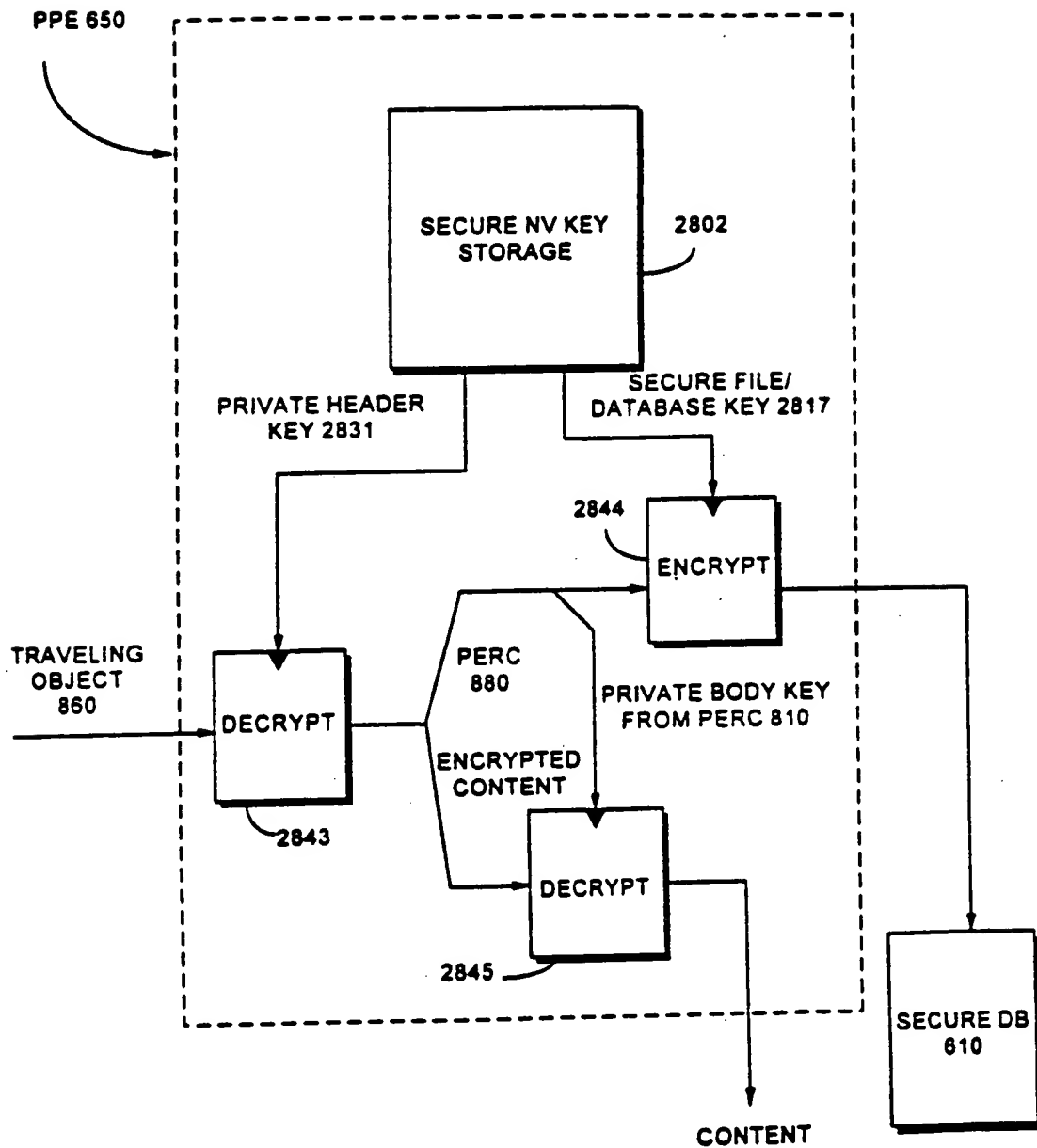
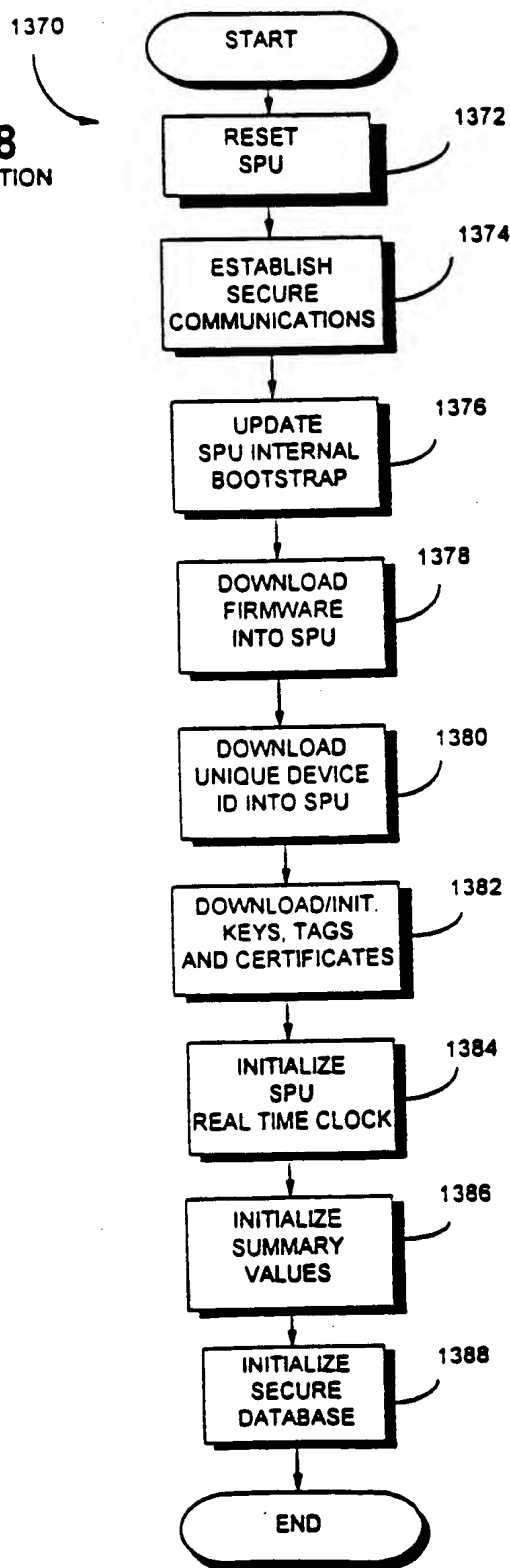


FIG. 67 TRAVELING OBJECT DECRYPTION

FIG. 68
SPU INITIALIZATION



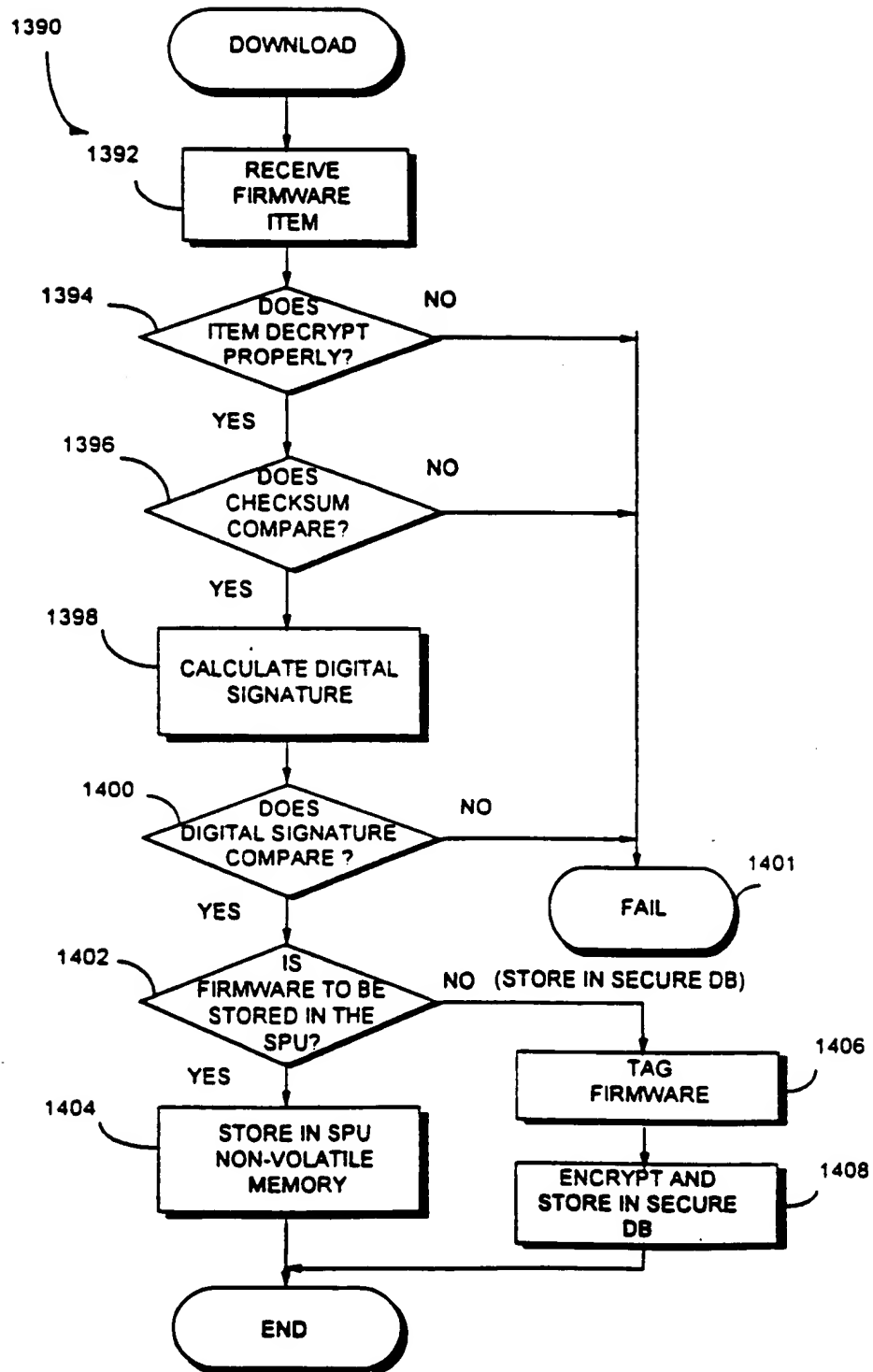


FIG. 69

SPU FIRMWARE
DOWNLOAD

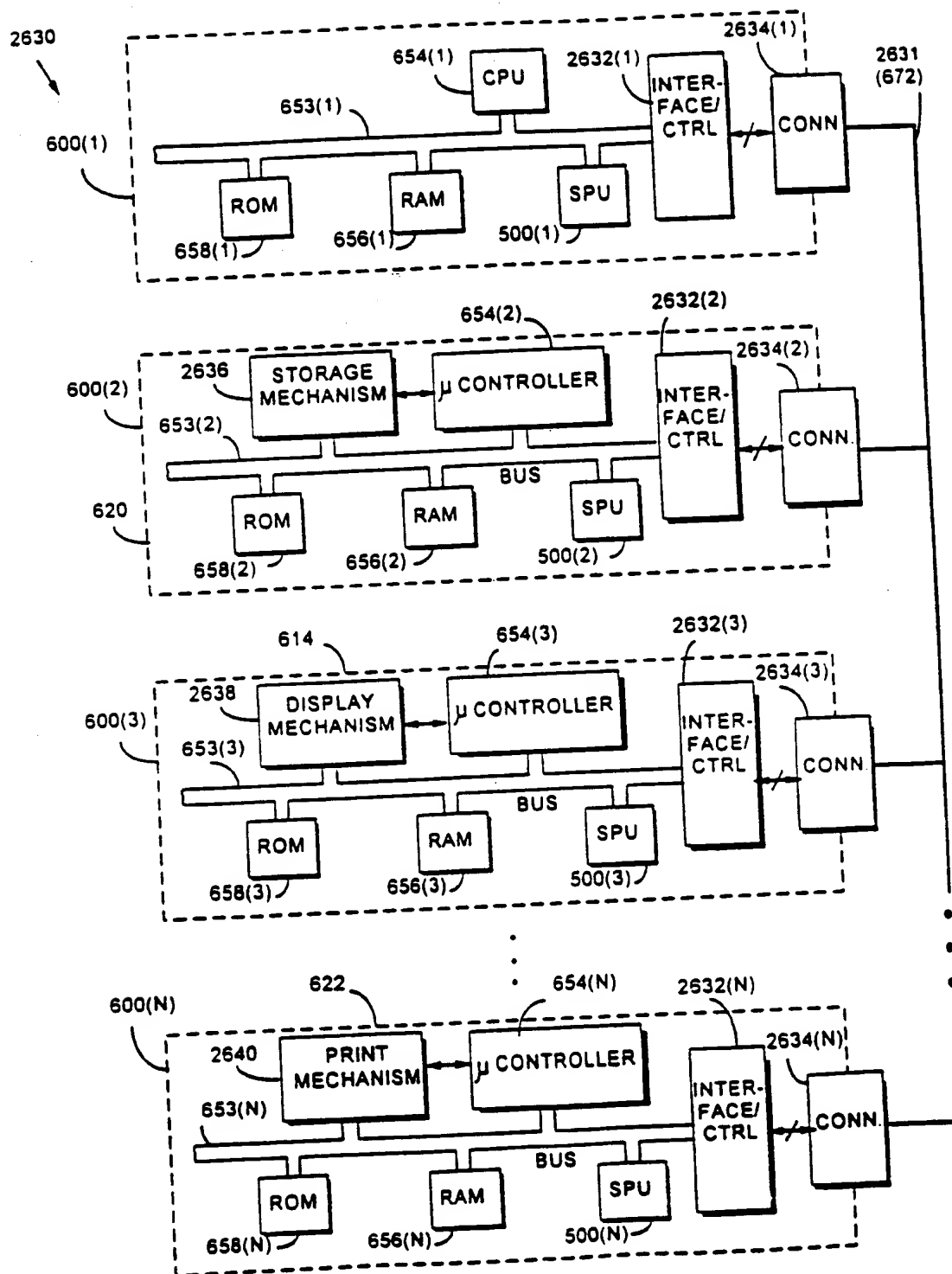
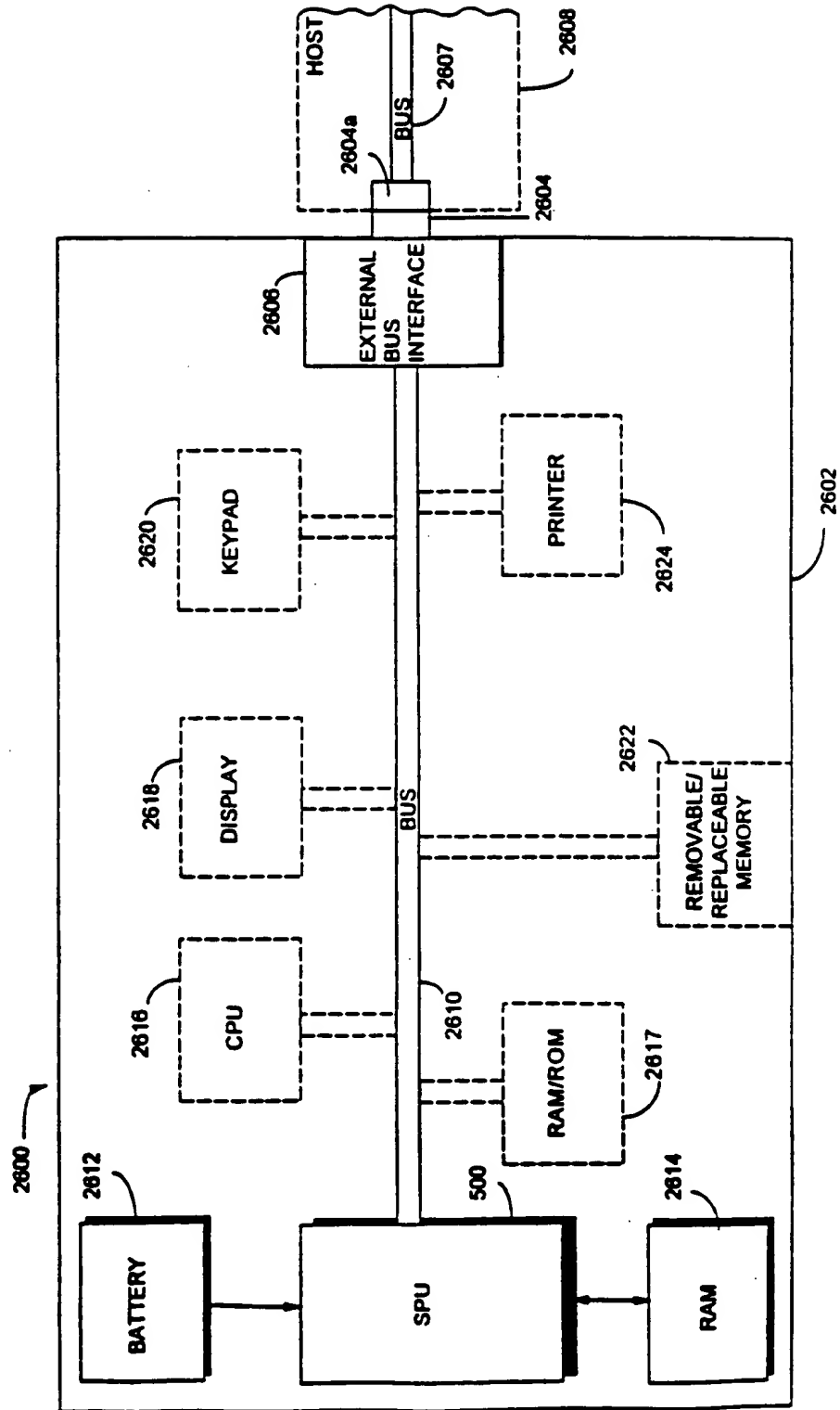


FIG. 70

FIG. 71
PORTABLE APPLIANCE



LOG IN USER INTERFACE

182

USER NAME: SHEAR, V.

PASSWORD: *

☐ LOGIN AT STARTUP

LOGIN


CANCEL

HELP

FIG. 72A

2660

YOU HAVE REQUESTED THESE PROPERTIES:



LOONEY TUNES NEWS!

2662

PROPERTY INFO

Your Cost: \$7.50

APPROVE

SUSPEND

CANCEL

MORE OPTIONS

2664

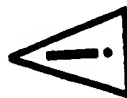
FIG. 72C

The figure shows a rectangular window titled "SET LIMITS:". Inside the window, there are four rows of labels and input fields:

- Row 1: "SESSION DOLLAR LIMIT: \$" followed by a hatched input box containing "50" (labeled 2666) and a vertical double-headed arrow button (labeled 2674).
- Row 2: "TRANSACTION DOLLAR LIMIT: \$" followed by a plain input box containing "50" (labeled 2668).
- Row 3: "TIME LIMIT (IN MINUTES):" followed by a plain input box containing "50" (labeled 2670).
- Row 4: "UNIT LIMIT:" followed by a plain input box containing "50" (labeled 2672).

To the right of the input fields are three buttons: "OK" (top), "CANCEL" (middle), and "HELP!" (bottom).

FIG. 72D



YOU HAVE REQUESTED THESE PROPERTIES:

LOONEY TUNE NEWS!

APPROVE

CANCEL

SUSPEND

Show Thumbnail

More Options ☒

YOUR COST : \$7.50

PROPERTY INFO

PROPERTY:	SIZE:	PUBLISHER:	AMOUNT:	UNITS:	COST/UNIT:	TYPE:	USE?	LINKS:	HIST:
CHUCK JONES BIOGRA...	256KB	WARNER NEW MEDIA	64	KBYTE	\$1.25	PREVIEW	✓	●	
▼ BUGS BUNNY.JPE...	1MB	WARNER NEW MEDIA	1	RECORD	\$5.00	DISPLAY	✓	▲	●
BUGS BUNNY.JPEG...	1MB	WARNER NEW MEDIA	10	RECORD	\$3.50	DISPLAY		▲	●
BUGS BUNNY.JPEG...	1MB	WARNER NEW MEDIA	25	RECORD	\$2.50	DISPLAY		▲	●
FRIZ FRELENG BIOGRA...	256KB	WARNER NEW MEDIA	120	SECTOR	\$5.00	PRINT			
TEX AVERY BIOGRAP ...	256KB	WARNER NEW MEDIA	50	PERCENT	\$2.50	COPY		▲	
► DUCKI RABBITI DU...	64MB	WARNER NEW MEDIA	7.0	MINUTE	\$7.50	COPY-PRO		▲	
MEL BLANC BIOGRAPH...	256KB	WARNER NEW MEDIA	1	SPECIAL	\$25.25	INSTALL		▲	
LOONEY TUNES DATAB...	600MB	WARNER NEW MEDIA	1	OBJECT	\$2000.00	ALL		▲	●

SET LIMITS...

SHOW BUDGETS

ACQUIRE BUDGET...

HISTORY...

TRANSFER...

PREFERENCES...

FEEDBACK...

HELP!

FIG. 73

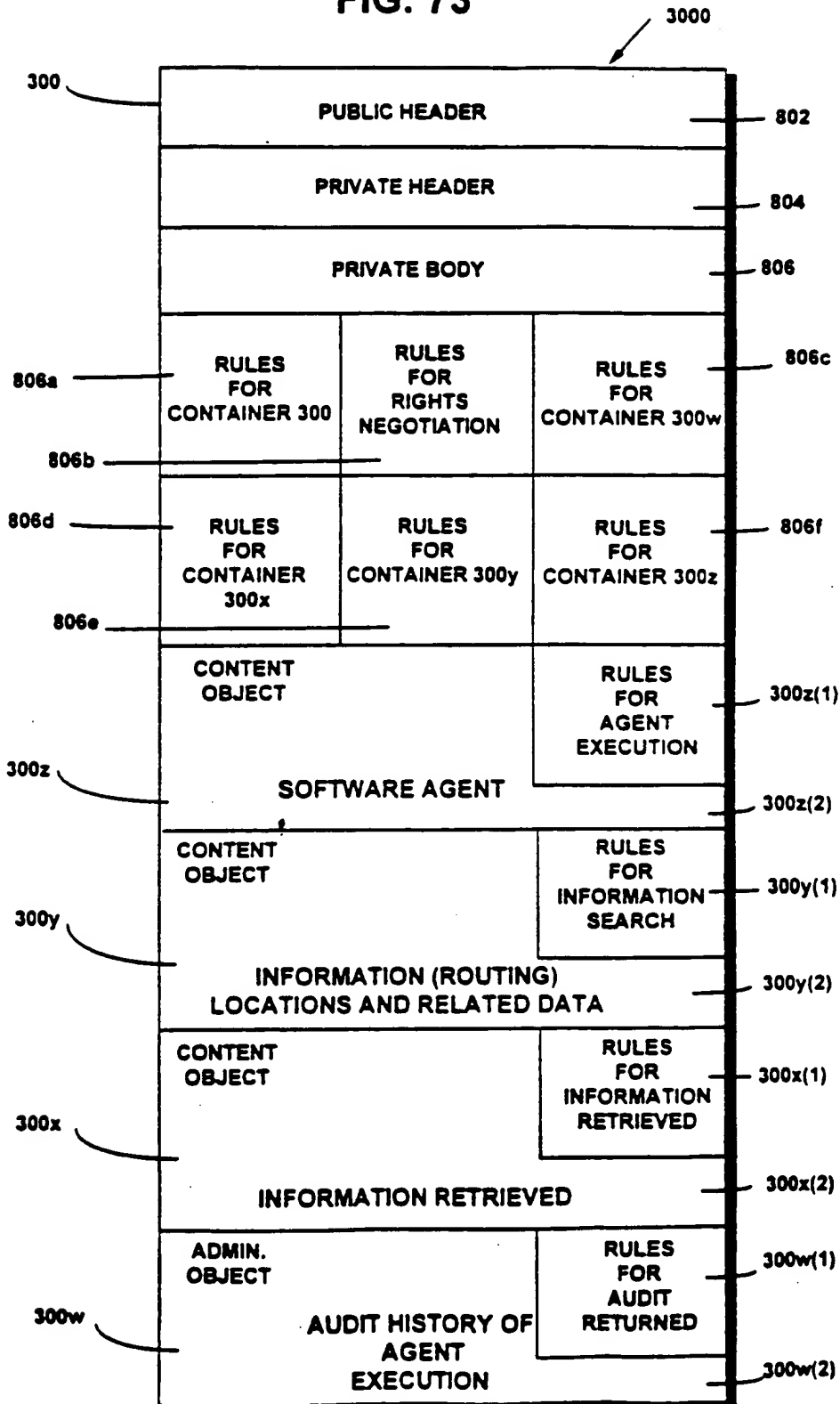


FIG. 74

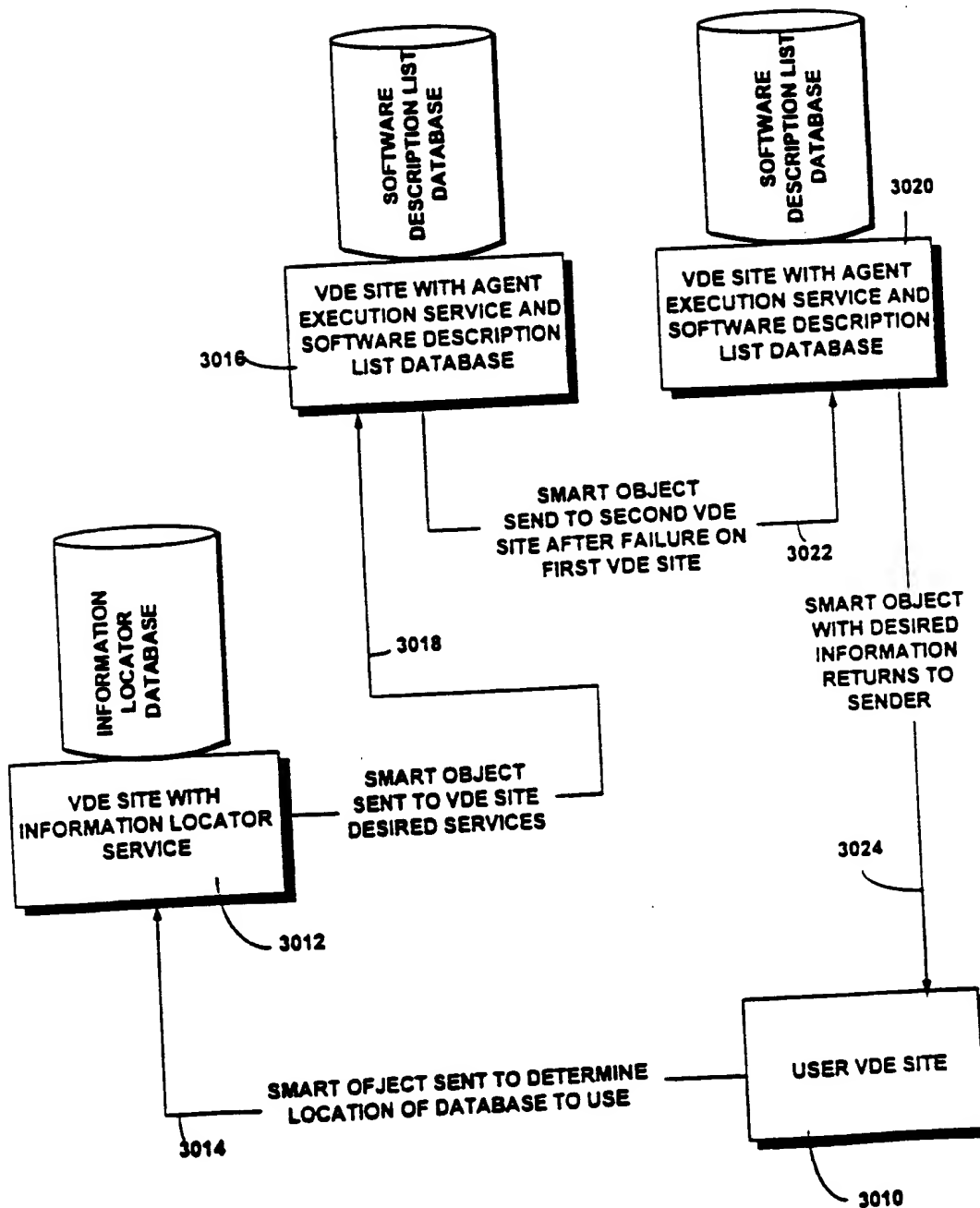


FIG. 75A

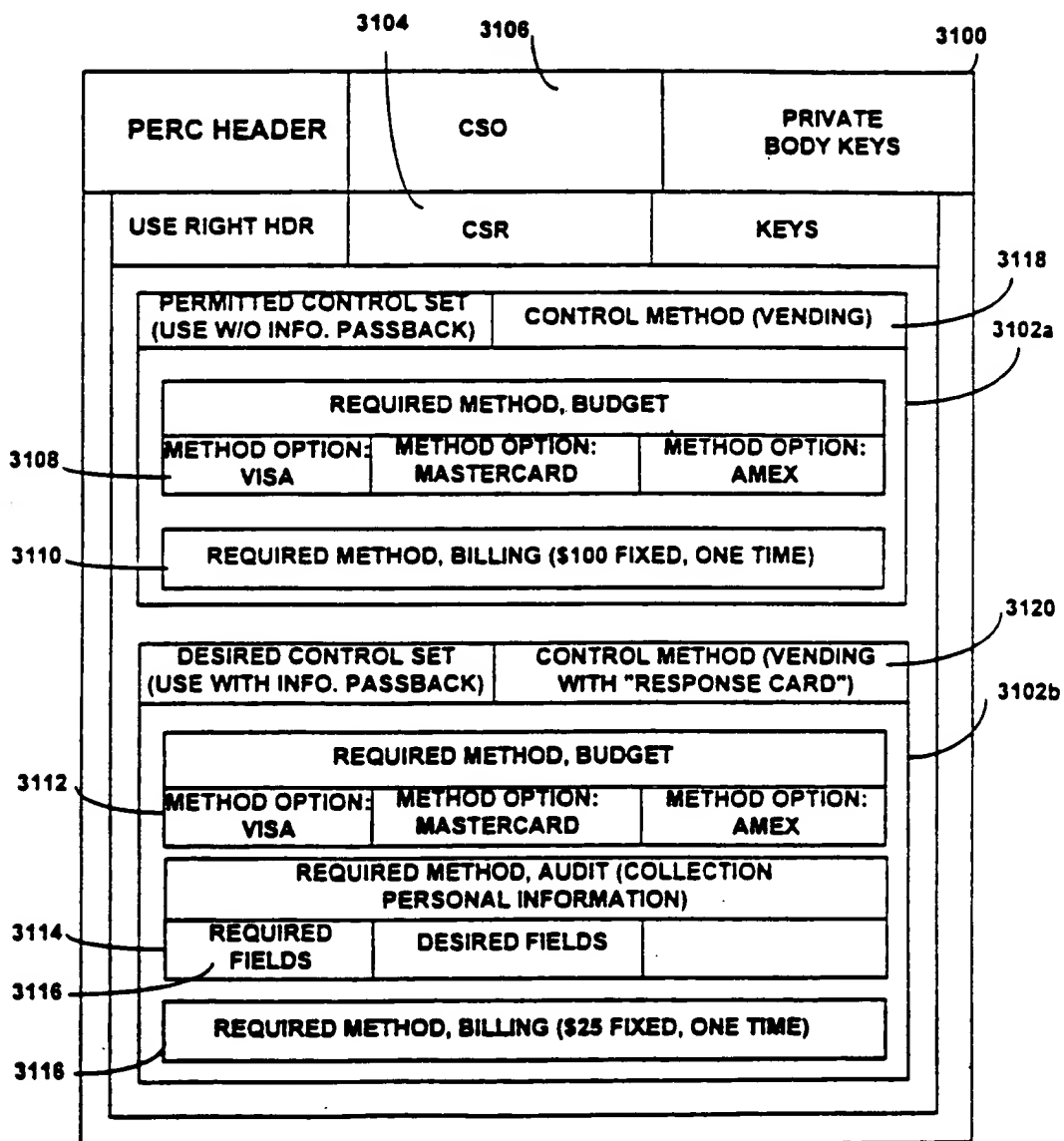


FIG. 75B

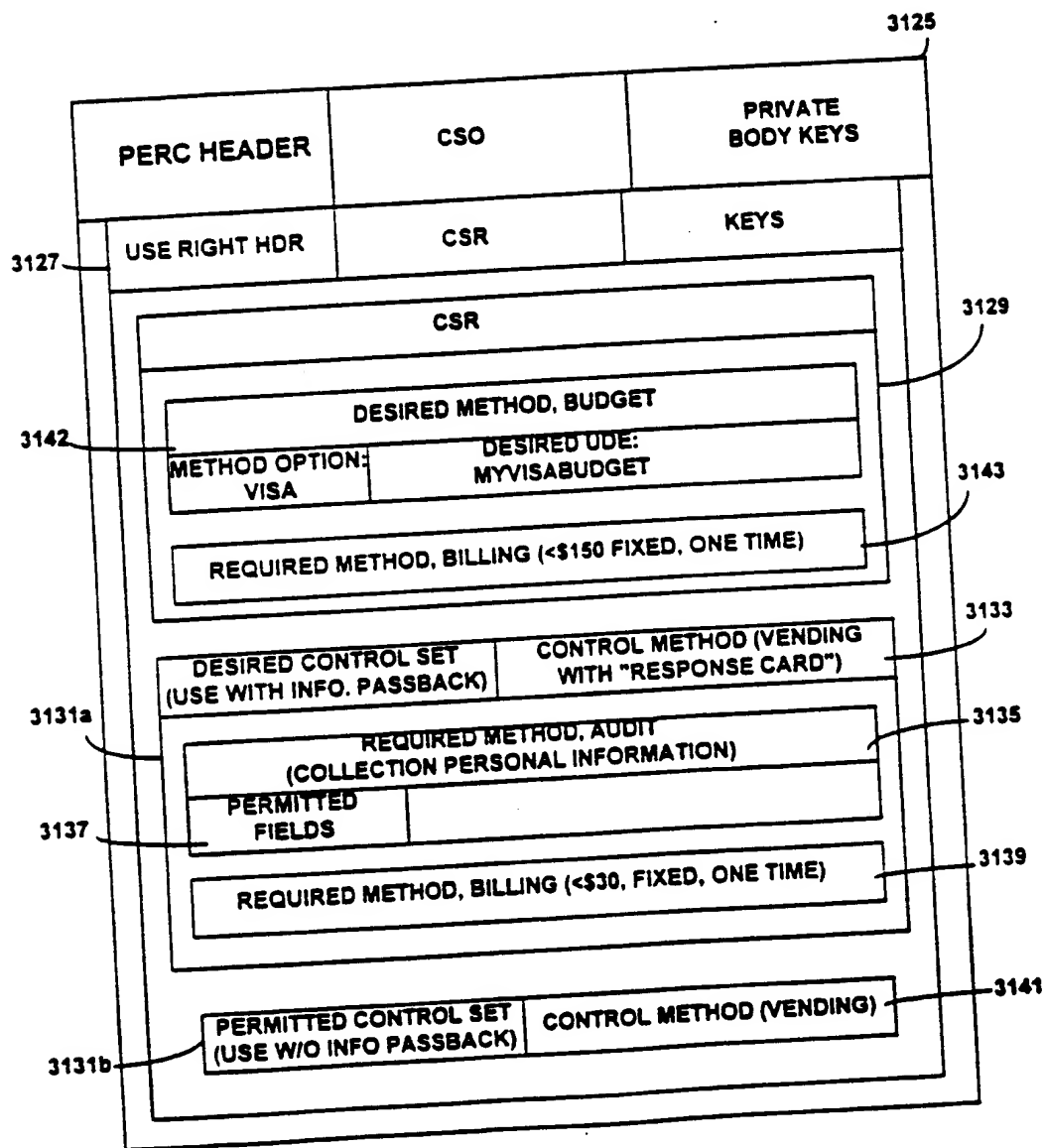


FIG. 75C

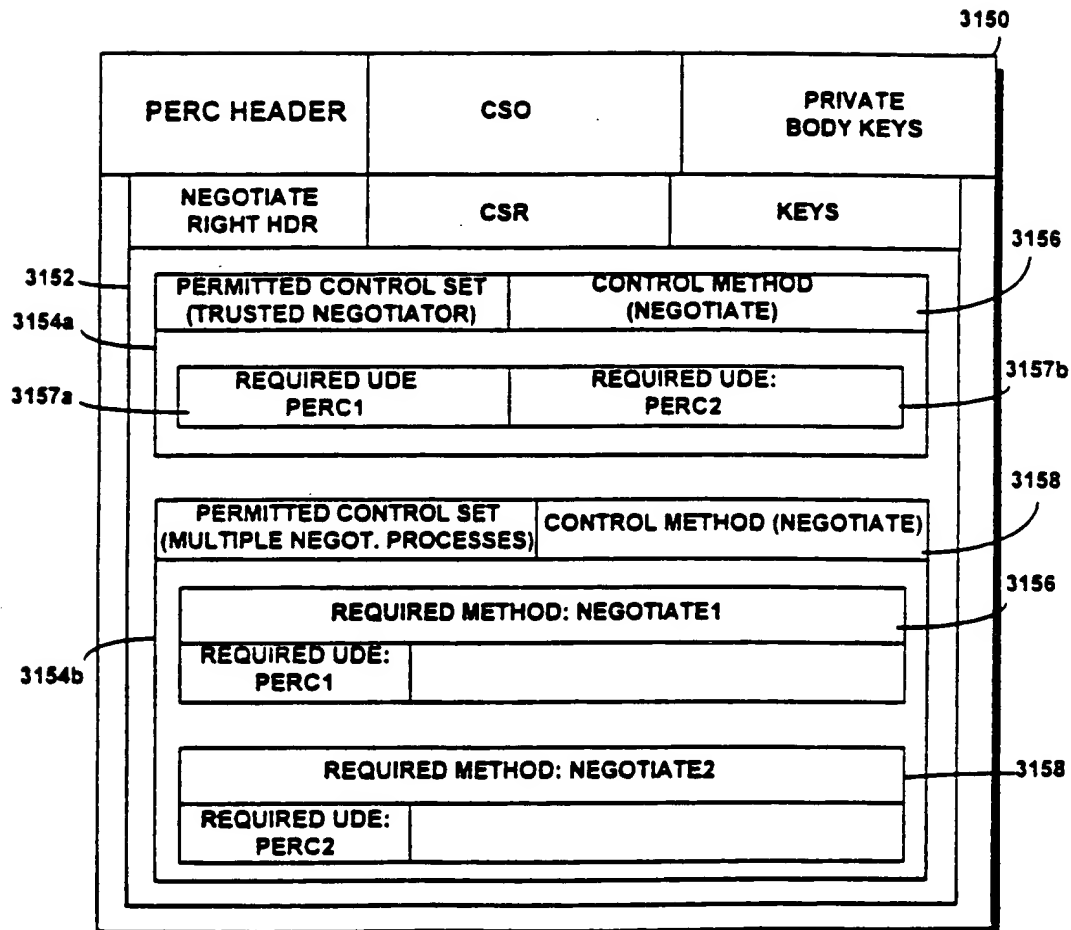


FIG. 75D

URT HEADER		CSO	DIGITAL SIGNATURE
USE RIGHT HDR		CSR	
CONTROL SET(USE WITH INFO. PASSBACK)		CONTROL METHOD(VENDING WITH "RESPONSE CARD")	
REQUIRED METHOD, BUDGET			
METHOD OPTION: VISA	DESIRED UDE: MYVISABUDGET		
REQUIRED METHOD, AUDIT (COLLECTION PERSONAL INFORMATION)			
PERMITTED FIELDS			
REQUIRED METHOD, BILLING(\$25, FIXED, ONE TIME)			

3160

3162

3164

3166

3170

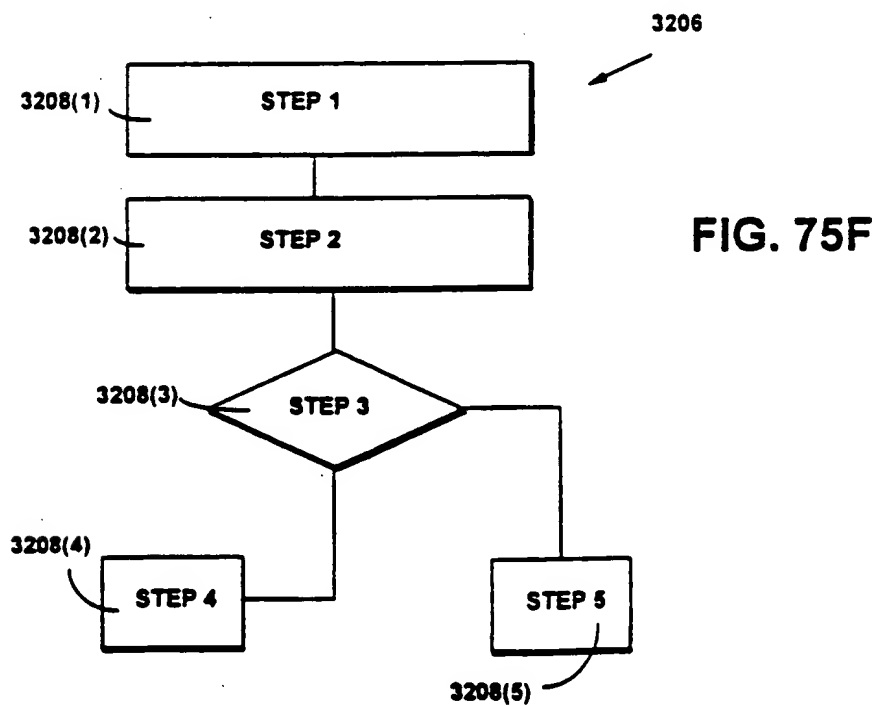
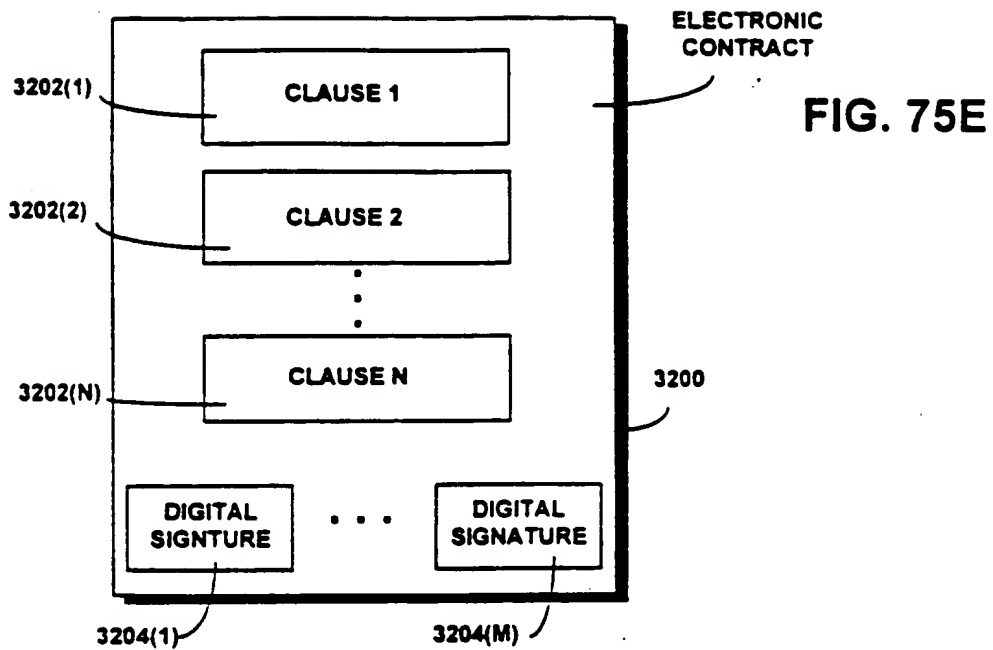


FIG. 76A

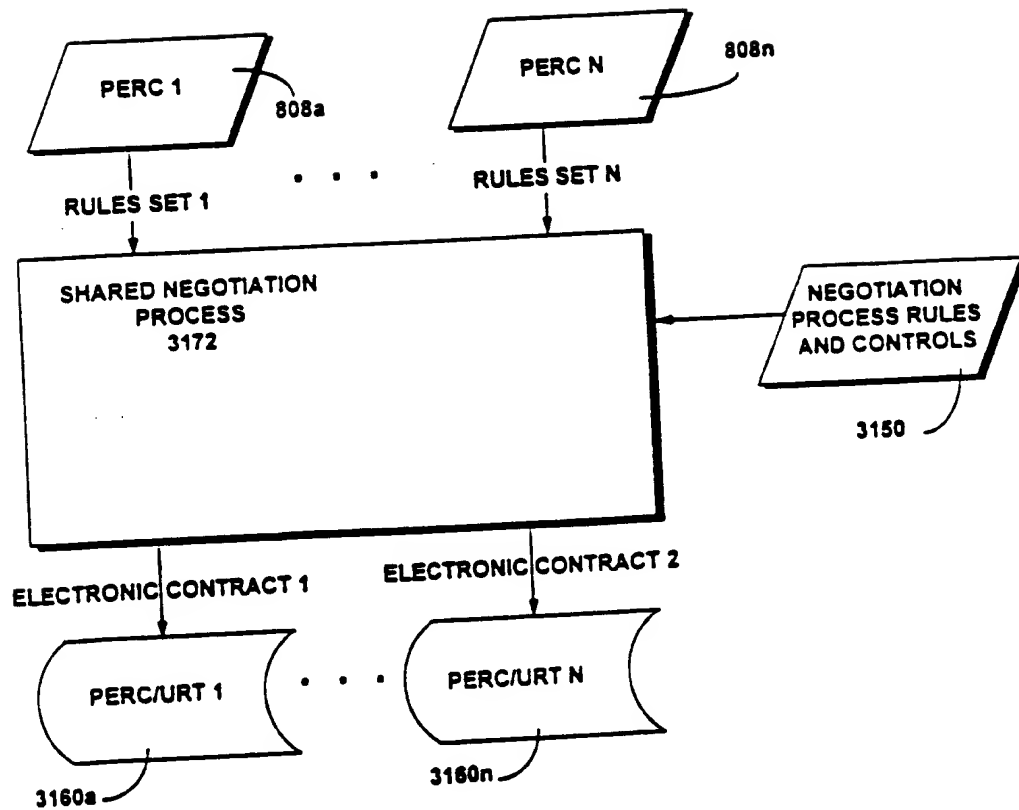


FIG. 76B

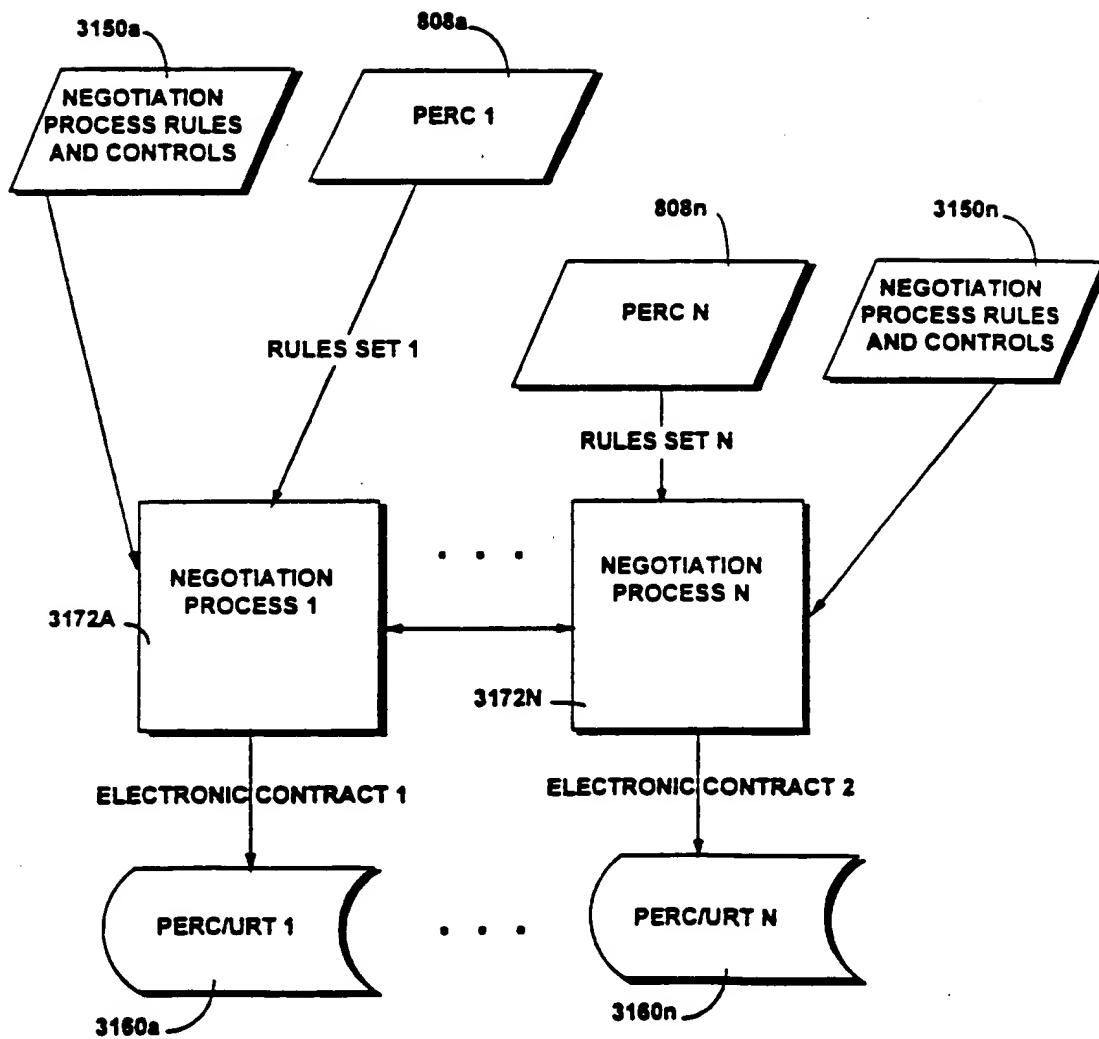
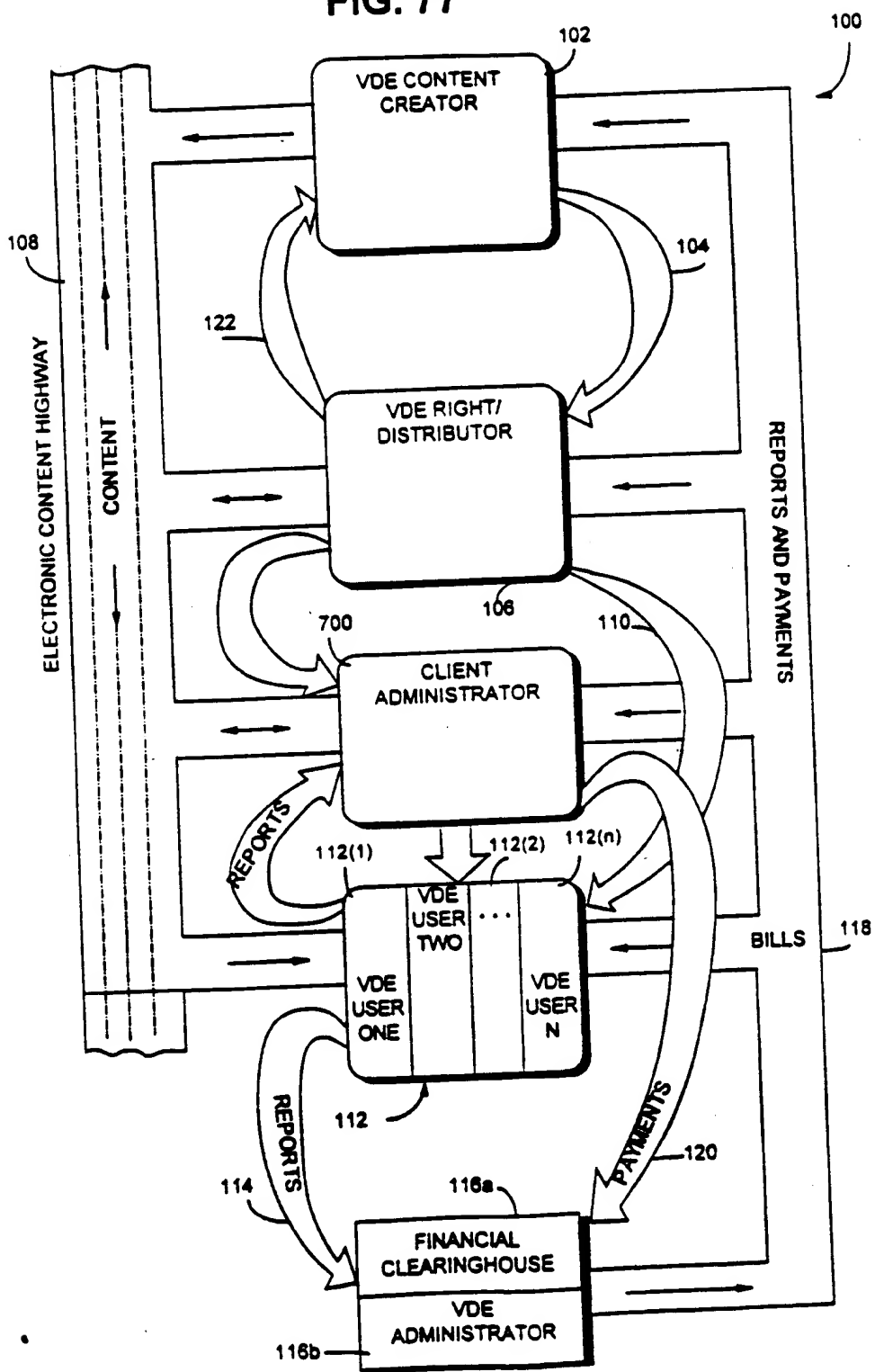


FIG. 77



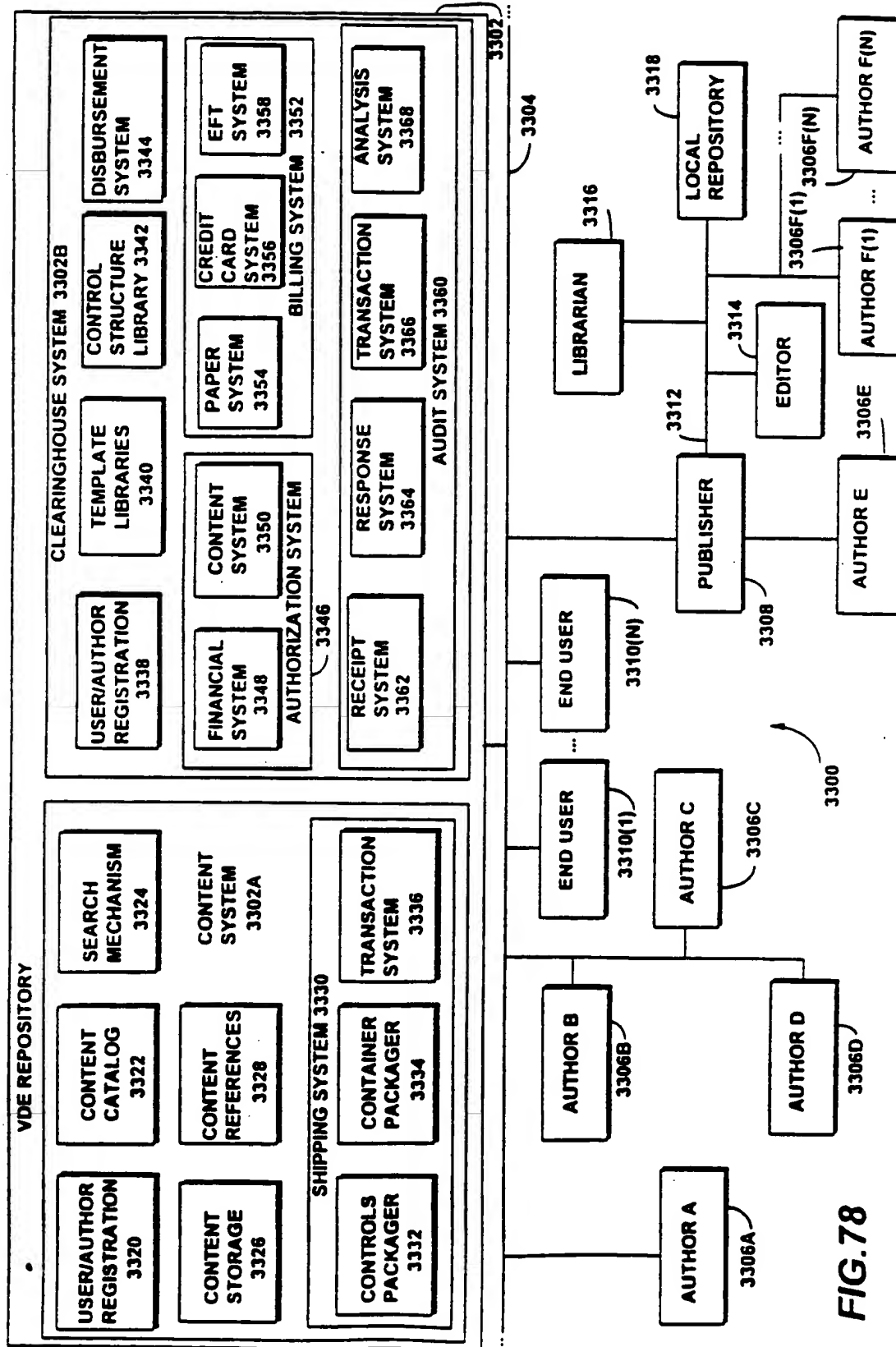


FIG. 79

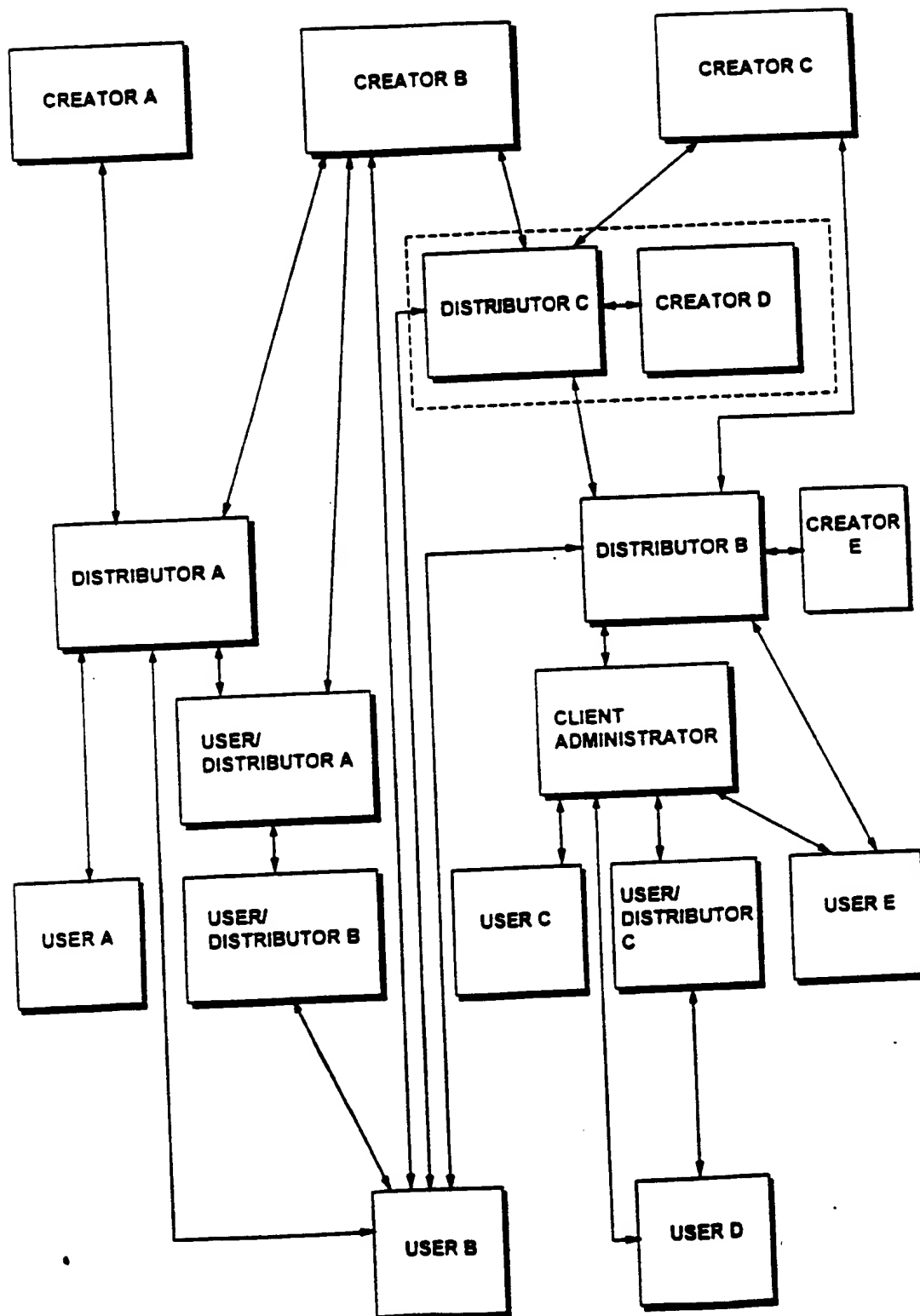


FIG. 80

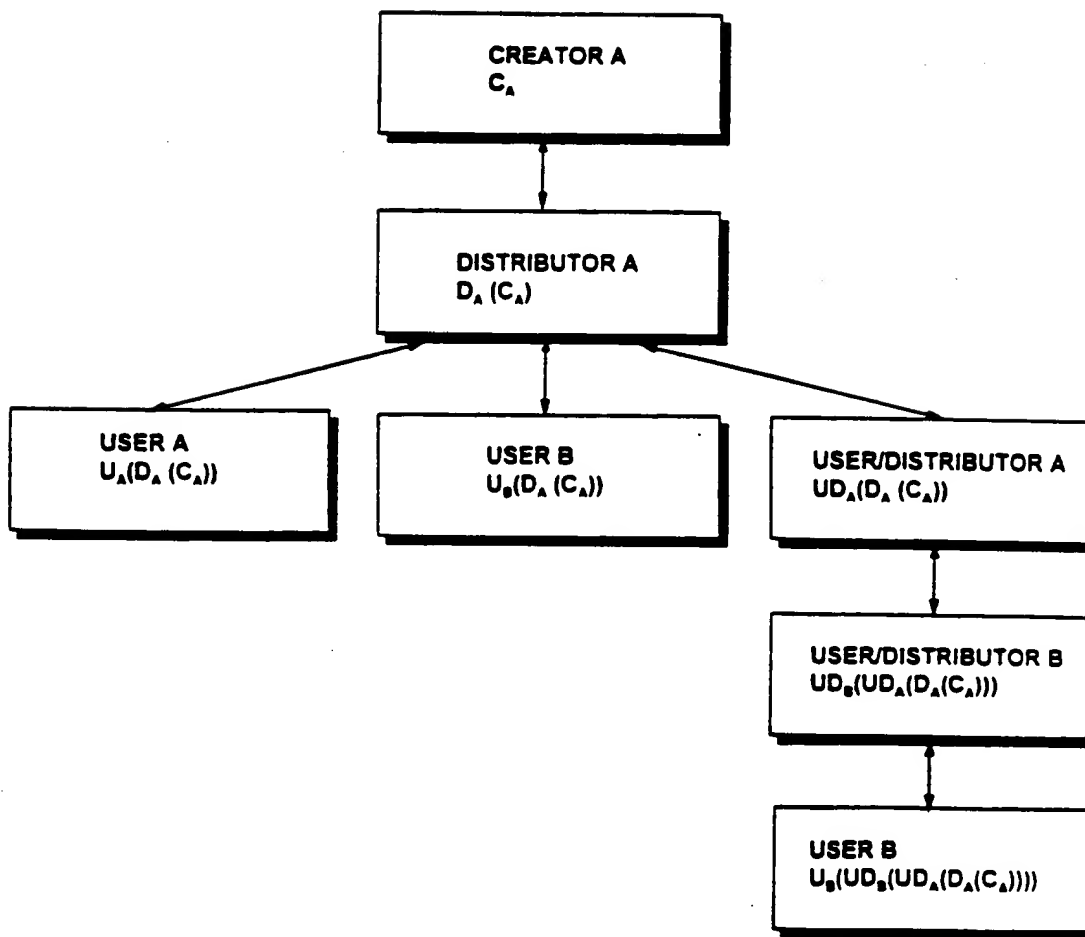


FIG. 81

```

graph TD
    CB[CREATOR B  
Ca] --> DA[DISTRIBUTOR A  
Da(Ca)]
    CB --> DC[DISTRIBUTOR C  
Dc(Ca)]
    DA --> UB1[USER B  
Ua(Ca)]
    DA --> UDA[USER/DISTRIBUTOR A  
UDa(Ca)]
    UDA --> UDB1[USER/DISTRIBUTOR B  
UDa(UDa(Ca))]
    UDA --> UB2[USER B  
Ua(UDa(Ca))]
    UDB1 --> UDB2[USER B  
Ua(UDa(UDa(Ca)))]
    DC --> UB3[USER B  
Ua(Dc(Ca))]
    DC --> DB[DISTRIBUTOR B  
Db(Dc(Ca))]
    DB --> UE1[USER E  
Ue(Db(Dc(Ca))))]
    CA[CLIENT ADMINISTRATOR  
CA(Db(Dc(Ca))))] --> UB4[USER B  
Ua(Db(Dc(Ca))))]
    CA --> UDC[USER/DISTRIBUTOR C  
UDc(CA(Db(Dc(Ca))))]
    CA --> UD[USER D  
Ub(CA(Db(Dc(Ca))))]
    UDC --> UC[USER C  
Uc(CA(Db(Dc(Ca))))]
    UDC --> UE2[USER E  
Ue(CA(Db(Dc(Ca))))]
    UD --> UD3[USER D  
Ub(UDc(CA(Db(Dc(Ca)))))]
  
```

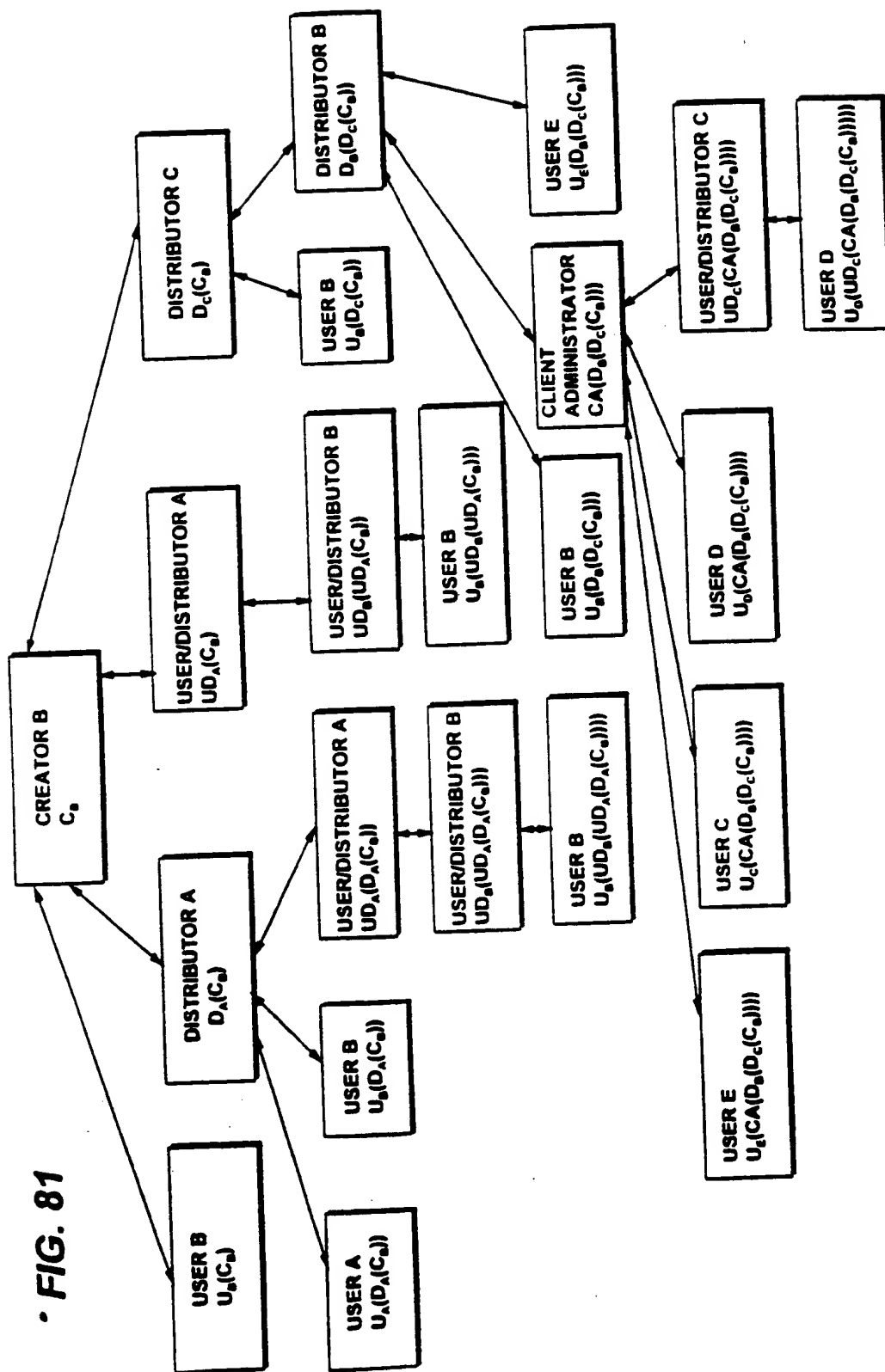


FIG. 82

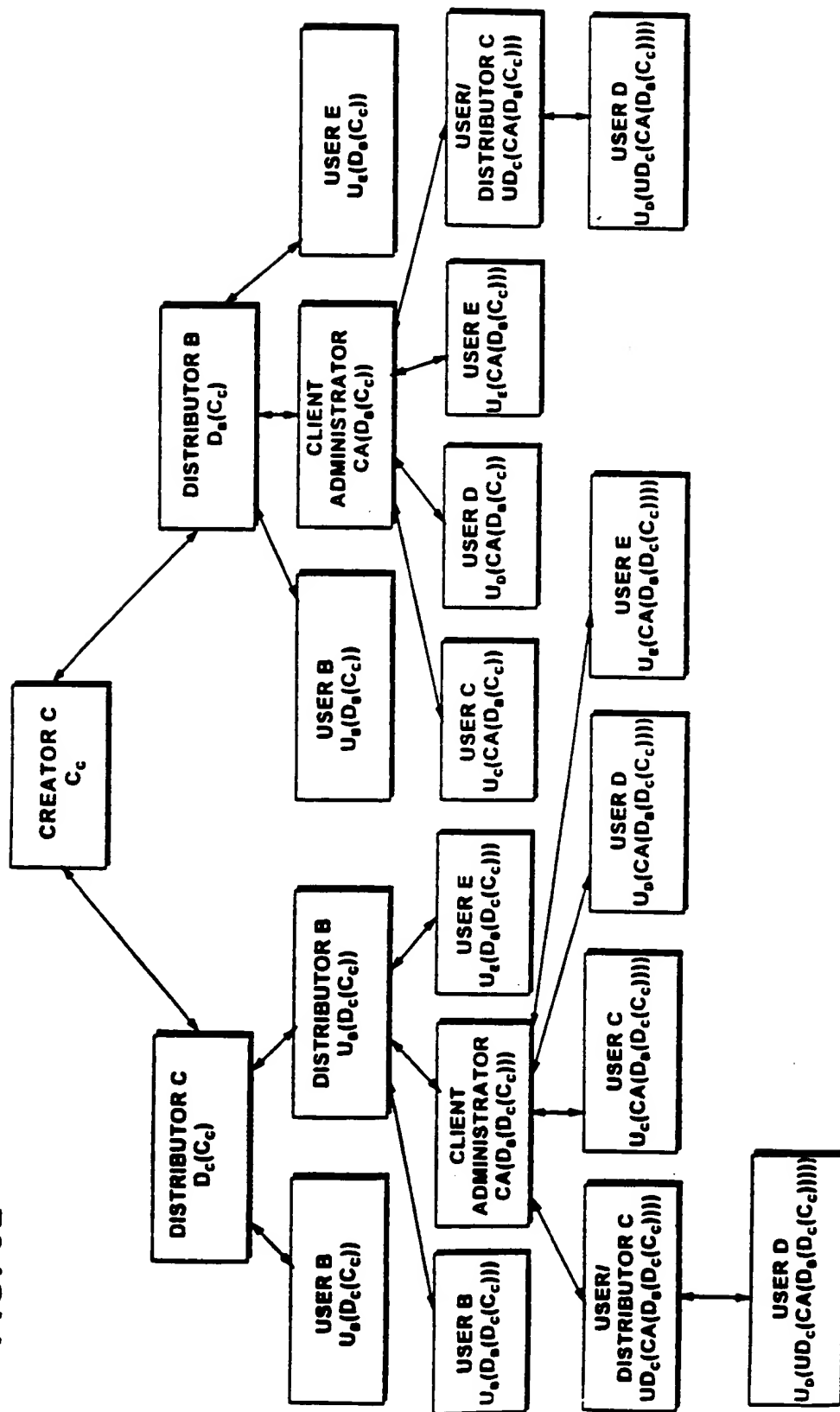


FIG. 83

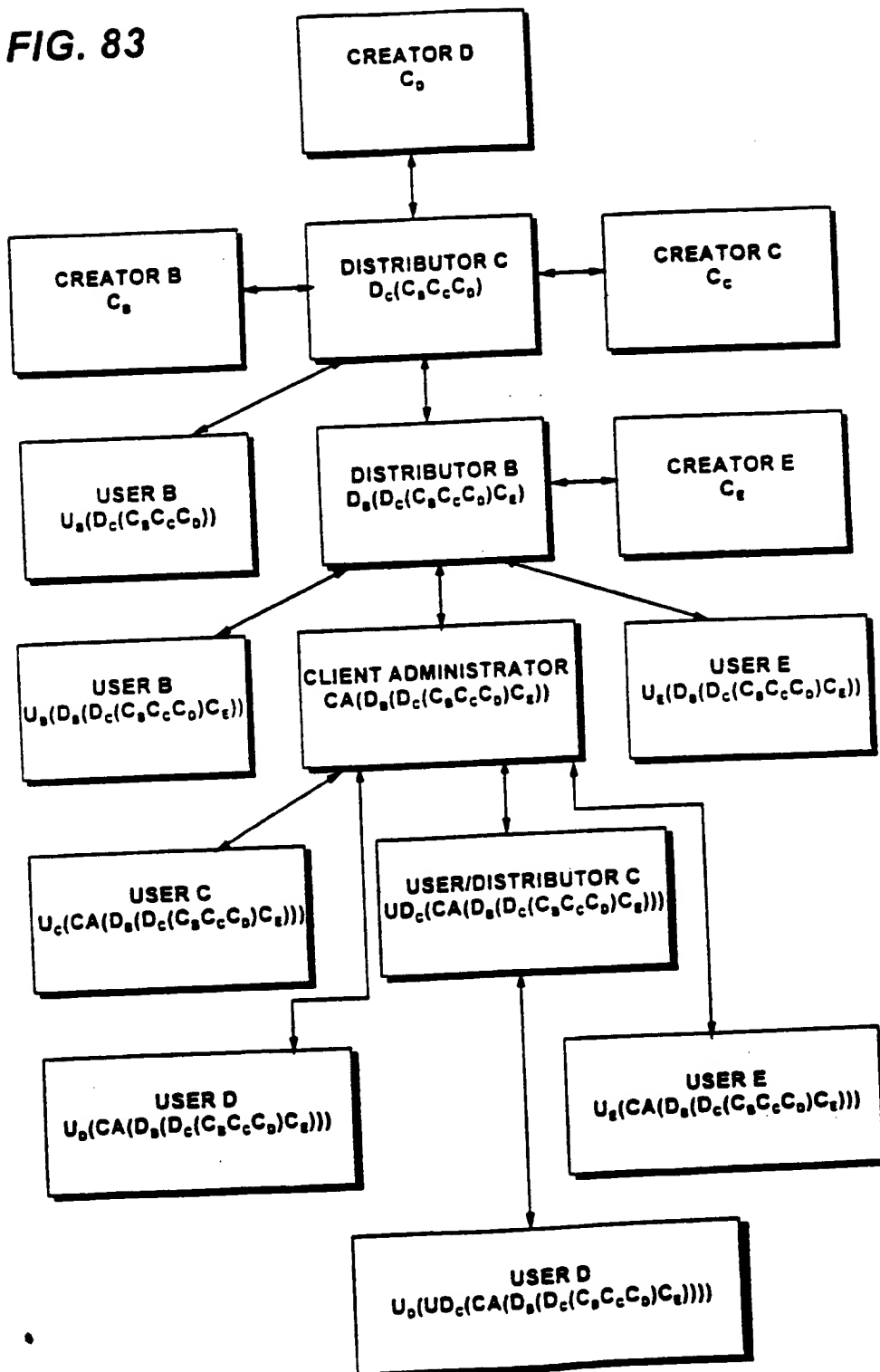


FIG. 84

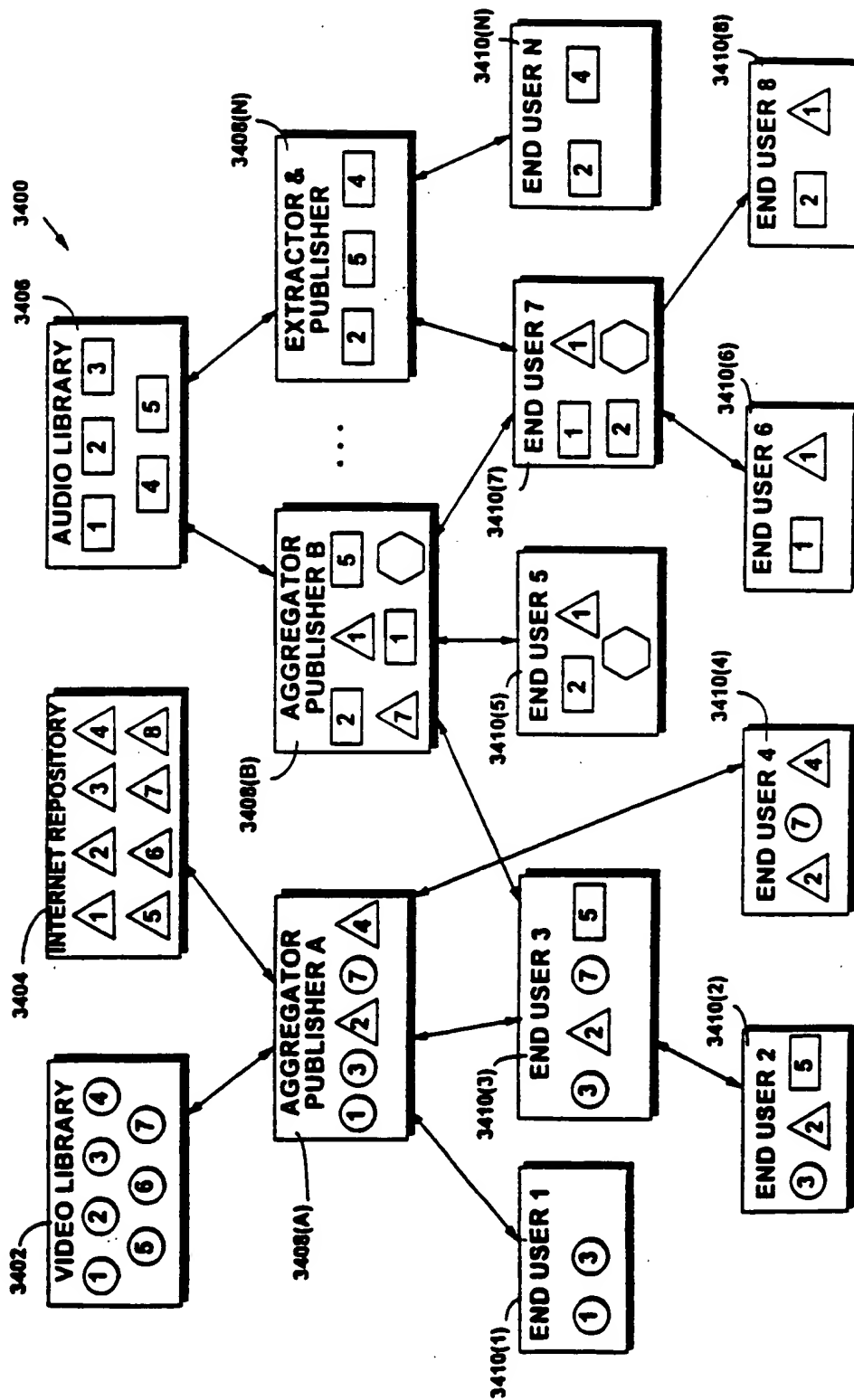
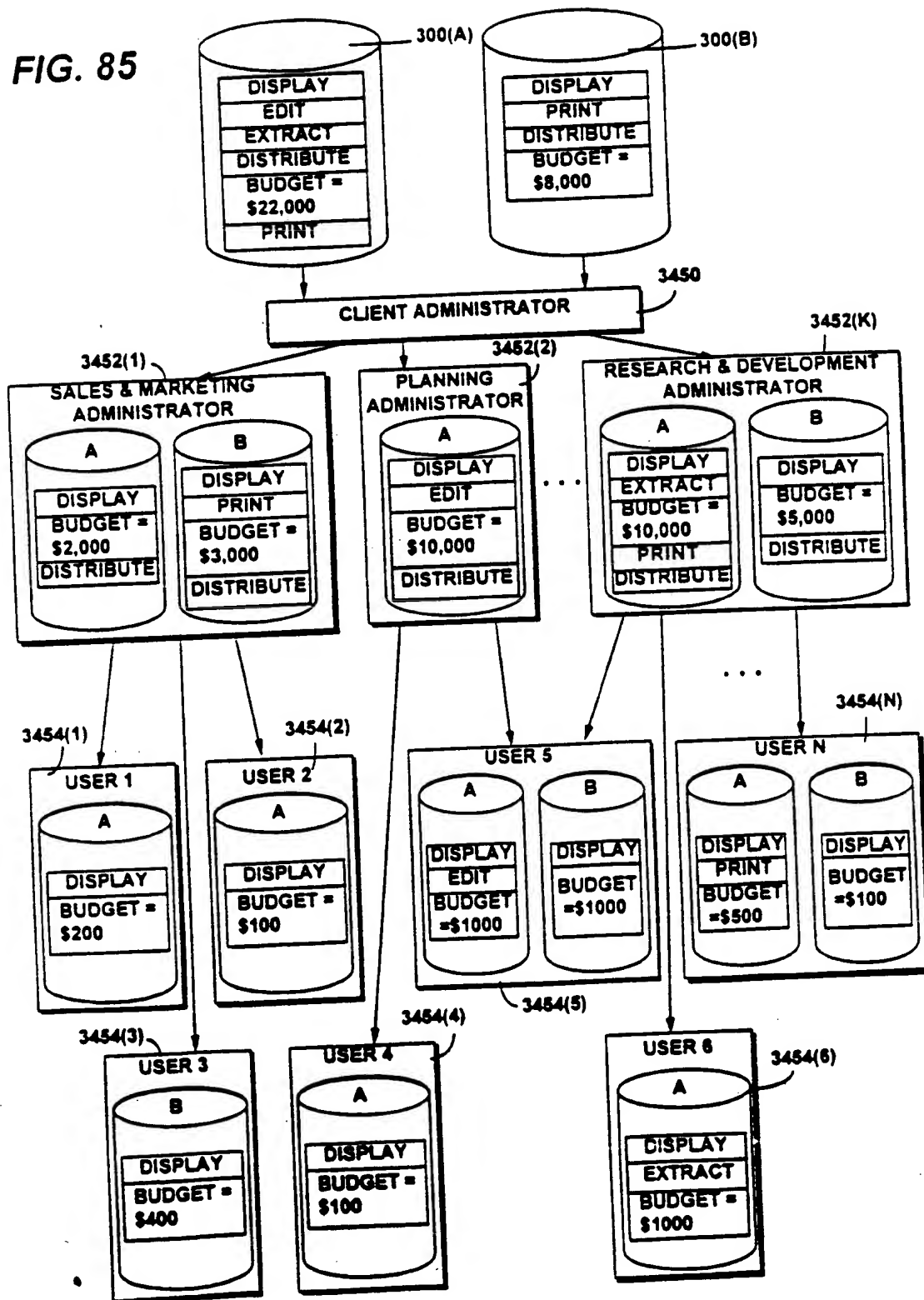


FIG. 85



[illegible]

A diagram of a lock mechanism. A rectangular box represents the lock. Inside the box, there is a horizontal bar and a vertical bar. A line labeled "KEY" points to the vertical bar. A line labeled "ENCRYPTION LAYER" points to the horizontal bar. A line labeled "PERMISSION RULES & CONTROLS" points to the right side of the box.

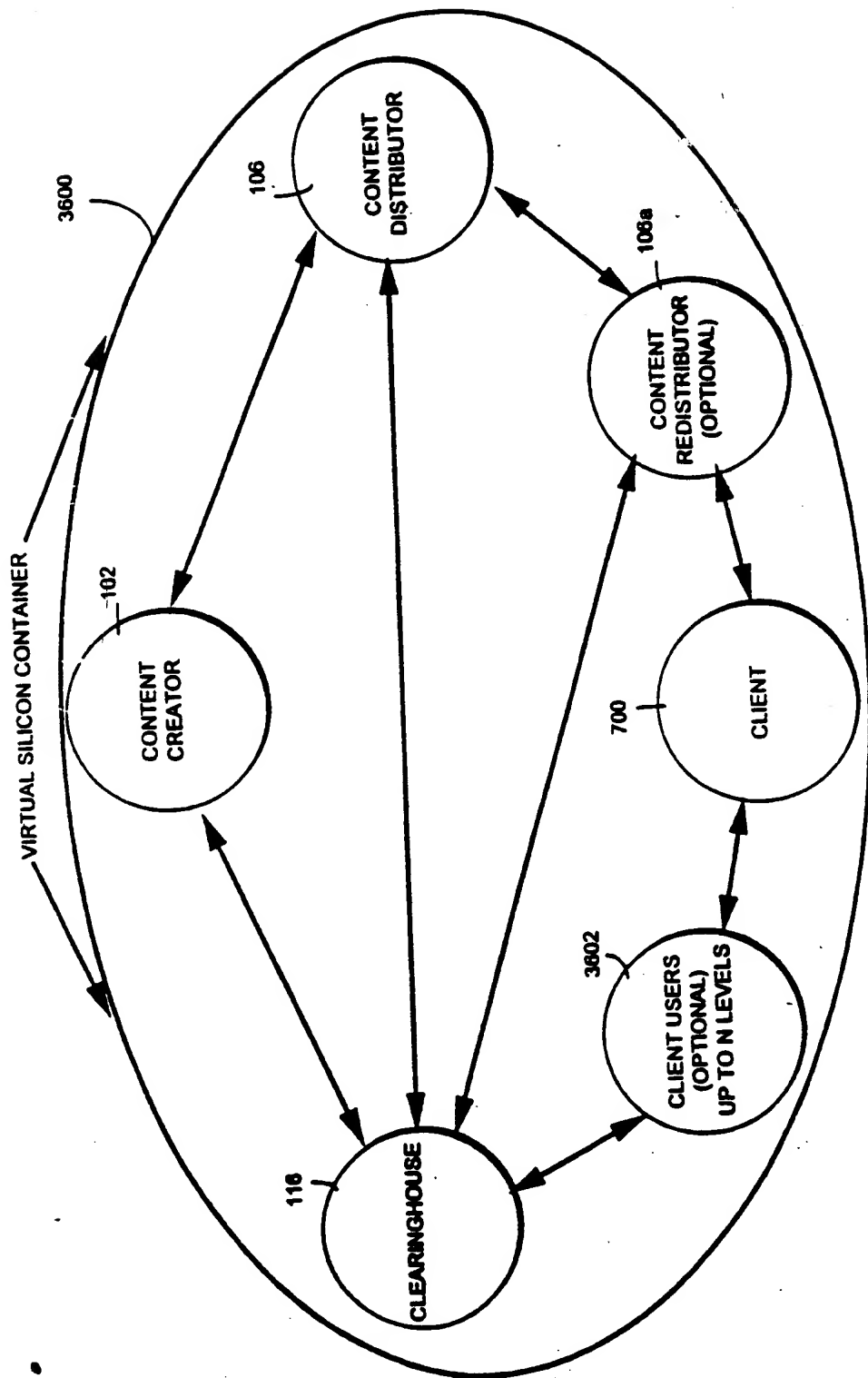


FIG. 87